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PARIS

FRANKFURT

THE JOURNAL OF CHILD PSYCHOLOGY AND PSYCHIATRY AND ALLIED DISCIPLINES

Official Organ of the Association for Child Psychology and Psychiatry

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NEW YORK

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London New York San Francisco

A Subsidiary of Harcourt Brace Jovanovich, Publishers

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BRIEF FOCAL FAMILY THERAPY WHEN THE CHILD IS THE REFERRED PATIENT—I. CLINICAL

ARNON BENTOVIM* and WARREN KINSTON†

INTRODUCTION

OVER THE past two decades there has been considerable interest in finding ways to shorten psychotherapeutic work, and generally increase the efficiency of psychiatric professionals via brief intervention methods (Malan, 1963; Sifneos, 1967; Parad and Parad, 1968; Small, 1971). This trend has only relatively recently become evident in the field of child and adolescent psychiatry, coincident with the development of theories and techniques which recognize the parents, extended family, and social network both as targets for change and agents of change (Skynner, 1969; Rosenthal and Levine, 1970; Argles and Mackenzie, 1970; Leventhal and Weinberger, 1975; Minuchin *et al.*, 1975).

Within the broad rubric of "family therapy", many treatment approaches have been used. Most of the shorter methods require an active technique with the therapist engaging directly with the family members, setting family tasks, openly acting as a model of healthy functioning, providing videotape feedback of interactions, interfering with dysfunctional behaviour patterns, advising, or consciously double-binding (Alger and Hogan, 1969; Beels and Ferber, 1969; Zuk, 1968; Haley, 1971; Crowe, 1973; Minuchin, 1974). Even those techniques more directly emerging from psychoanalytic theory, as described by Ackerman (1958), Dicks (1967), Zinner and Shapiro (1974) and Boszormenyi-Nagy and Spark (1973), involve considerably more therapist activity and direction than is customary in individual psychoanalytic therapy.

In our own growing experience of working with families conjointly over the past 10 years in the Department of Psychological Medicine at The Hospital for Sick Children, London, we have become impressed by the value of family intervention whatever the orientation of the therapist. Diagnostic work usually takes place in a family setting and wherever possible treatment aims are rapidly clarified so as to harness the charge of potential associated with the first meeting between a disturbed family and the professional (Haley, 1970). The problem then arises to determine an appropriate treatment technique to maintain and foster alterations in family functioning. Without a clear purpose or technique it is easy to allow work to become diffuse, commonly followed by various family members opting out. A particular problem is the emergence during family work of hidden problems and demands,

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most commonly in our experience in relation to long-standing, but carefully avoided, severe marital disturbance.

The success in shortening individual psychoanalytic therapy by using a focal approach (Malan, 1963; Balint *et al.*, 1972) suggested the application of a similar model to family work. A work-shop was set up to enable staff to develop a "family focus". An experienced staff member of the Tavistock Clinic's Brief Psychotherapy Work-shop agreed to act as Consultant and Group Leader during the first year (1973-1974) and cases were brought, family sessions written up, and the treatment process followed. This paper exemplifies the clinical work done with this "brief-focal" model. The results are set out in a second paper (Kinston and Bentovim, 1978).

THE WORKSHOP PROCEDURE

Following the Department's full diagnostic procedure, the case was brought by the therapist(s) who provided the workshop members with details of the referral, a brief description of the family, and the salient pathological factors with elaboration as necessary. The workshop developed a hypothesis to explain the symptom in terms of the salient factors and a minimum of psychodynamic understanding. This "focal hypothesis" then became a reference point for therapeutic progress, and a source of predictions for assessment of success or failure of the treatment. The actual treatment is determined by the "focal plan" which suggests how the desired change is to be brought about. This plan varied from straightforward direction to the therapist, e.g. "interpret the dynamics, i.e. the focal hypothesis", or "get Father to go out more with Mother", to more subtle demands, e.g. "clarify communication" or "increase sharing of feelings". The values of the workshop were psychodynamic insofar as there was emphasis on the importance of developmental factors, the needs of the family members to feel understood, and the necessity for a working alliance. As the treatment unfolded, new phenomena or information sometimes came to light which demanded a revision of the focal hypothesis or focal plan. To illustrate the process of developing a focal hypothesis and arriving at and implementing a focal plan, two cases will be described. In the first a focal plan could be formulated early and worked with consistently to termination, while in the other it could only be arrived at over a period of time as the therapists worked to create a "shape" in the diffuseness of the pathology.

CASE 1: MARGARET AND HER FAMILY

Family

Margaret's family consisted of her father (43 yr) and mother (37 yr), both secondary school teachers, and two sisters. Margaret at 10 yr was the youngest, Alice was 13 yr and June 15 yr.

Referral

Although Margaret had suffered from complex tics since the age of four, these had become increasingly frequent and severe. The abnormal movements included sniffing, coughing, snorting, sudden teeth clenching, flapping of the elbow, slapping her chest or thighs with both hands, and sudden stamping on the floor.

Salient facts from the history

Family history of illness: Maternal grandmother—chronic arthritis. Three paternal uncles—all with moderately severe depression.

1964: Mother suffers a depression (Margaret is 6 months).

1967: The family moves from the north of England to London, Margaret (4 yr) commences school and her symptoms appear. Mother starts at a teachers' training college.

1970: Father becomes redundant, but appears unconcerned. June (12 yr) has tension headaches followed by eye-blinking. Mother has a recurrence of her depression.

1971: Father then takes up teachers' training. June's symptoms remit.

1973 (time of referral): Margaret's symptoms worsen. Father is in his first year as a teacher at a school with high academic standards but pupils of mediocre ability, and mother is also teaching. Both parents are extremely conscientious about their jobs and work hard to be successful. This attitude extends to home life, with father doing chores which could be done by other family members and Mother doing a great deal for the children and effectively treating them as if they were much younger than they are.

Observations of family interaction

(a) There was a marked restriction of verbal and non-verbal expression of feelings, and communication generally was marked by inhibition of activity.

(b) Feelings of anger, depression and areas of conflict were avoided by all family members. Father, particularly, was not able to tolerate and respond supportively to his wife's depression.

(c) The family as a group depreciated itself, and members failed to express appreciation of each other.

(d) Each family member had excessively high standards of performance for himself and for the others, resulting in a sense of failure in the family atmosphere. This extended to the parent's sexual relationship.

Dynamic hypotheses

After combining the salient facts with the observations at interview, two focal hypotheses were determined.

1. Margaret's ties were a way for her to deal with feelings which could not be communicated within the family atmosphere of inhibition, and with a desire for activity which had to be suppressed in accord with the same family rule.

2. The excessively high standards together with the lack of mutual support and appreciation within the family meant that the members' self-esteem and sense of well-being could not be maintained.

Focal plan

In this case, the plan follows from the hypotheses in that the aim is to help the family appreciate the extent of the inhibition they impose on themselves, to promote freer communication of feelings, and to encourage expression of mutual appreciation within the family. A series of 10 interviews were suggested for the carrying out of this plan . . . the interviews to be scheduled at 3 weekly intervals approximately.

Developments in treatment

The 10 interviews extended from November 1973 to June 1974. Initially sharing of feelings and free communication between family members was frustrated by June who routinely came between the parents and overwhelmed Mother at the expense of the other children. This was observed in the sessions and reported by the family. At home she monopolized Mother, particularly late in the evenings, and so prevented the parents from being together. She was actively in competition with her younger siblings and failed to appreciate their interests and capacities. The therapists pointed out that the parents were allowing June to cross the generational boundaries and prevent them having an adult relationship. They were also letting her prevent them from responding to the other children and their needs. June's role in the family and the family's collusion in its maintenance having been clarified and challenged, Mother's difficulties became apparent. She had a tendency to take over for the children and to speak for them. This over-protectiveness was foiling their emancipation which she both wanted and dreaded. Mother's dependency needs had not been adequately met due to her own mother having suffered from an arthritic condition. She took her needs to professional colleagues rather than to her family. Father emerged as a family scapegoat in spite of, or perhaps because of, his efforts to live up to family expectations and meet his own ideals. His efforts left him and the family frustrated.

An extract from the second interview will illustrate some of these points:

After a period of limited spontaneous conversation, therapist B asked June, who had been lively in the previous session, why she was less lively on this occasion. The family informed the therapist that June was writing examinations. Mother added that June had got up early, panicked and did not seem to realize that panic would not help. June was at the stage where she did not have enough confidence—her parents had, her teachers had, but June did not. Therapist A commented that the family as a whole seemed frightened of trying anything new. He observed that although it was only June who had the exam, no one else seemed lively either. There then followed a spirited discussion as to how they had gone half a mile west of the hospital and had walked back from the tube station because they were early, and father had taken them the wrong way. Alice retorted that "he always did". June said: "I told him before we started but he wouldn't listen". Father then explained that he had done this to check whether cheap seats were available at a theatre for him to take the family after the interview. He did not tell them because he was afraid that they would be disappointed if his plan was not possible. He was also half afraid that June might say she wanted to go to a different show and he wanted to avoid challenging her over this. The family said that he tended to be secretive like this and wanted to make decisions silently, expecting others to read his mind without telling them what or why. Therapist B suggested that perhaps Father wanted to keep the plan secret to avoid arguments since he always wanted to be right. He agreed and the rest of the family laughed. June said Margaret was like that as well.

This extract illustrates the inhibition of communication, the fear of confrontation, the lack of appreciation, and the failed attempt to be ideal with consequent frustration. It also shows the style of therapist intervention and the family response. A

subsequent interview with the parents alone clarified the patterns further. June had been conceived too soon after the marriage, at which time Father became increasingly concerned about financial security and the need to work more and Mother became depressed. This set the stage for distance between the parents, June's monopoly of Mother and conflict with Father, and subsequent dysfunction. The parents were poorly synchronized with each other in various areas of living, e.g. when one was sleepy, the other was wakeful. Their difficulty in achieving pleasure, emotional and sexual, within the family relationship was reflected in their over-emphasis of the importance of work, and cast a shadow on family life. When the family was more relaxed during holiday periods, Margaret's tics were very much less in evidence.

The family attended from a considerable distance and could accept that Margaret's tics were only a part of the problem and everybody and the family as a whole were in need of help. The inhibition of talking and involvement was particularly marked in the two younger girls. Alice behaved as a rather amused onlooker, while Margaret was quite passive apart from her tics which became more directly related to family stress during the course of therapy. Haloperidol was tried with some benefit at one stage, but was discontinued due to its side effects. The problem of inhibition within the family was raised by the therapists and worked on repeatedly, especially in relation to pleasure. There was a shared fear, most marked in Mother, that airing of such wishes might prove catastrophic, with the wish for pleasure taking over and stopping any work at all. Inhibition of anger was not dealt with in as much depth, except in relation to June's controlling ways with Mother. Father's fear of depression was also barely touched. The problems of self-esteem were worked on in various ways. Father was able to admit his anxieties over his performance at work. At home he was set the task of getting the children to do household chores and get round on their own. Both parents were encouraged to appreciate their children and vice versa. Previously efforts had been unnoticed, e.g. the children's achievements at work and music, or taken for granted, e.g. Father's organization of outings.

The workshop consensus was that the focal plan had been adhered to. Issues unrelated to the focal plan had emerged and been bypassed, e.g. sexual problems between the parents and sexual anxieties in the relationship between Father and June. The focal plan had been clearly understood by the family and they had changed in response to the therapeutic effort.

Short-term follow-up

The method we have employed lends itself to meaningful follow-up assessments, as the focal hypotheses by their nature provide criteria by which assessment of change may be evaluated (Malan, 1959). In the case of Margaret's family the criteria would be as follows: each member should have access to the whole range of emotions and be able to communicate freely within the family; intra-family criticism should be low and mutual support and appreciation should be evident; the atmosphere generally should be pleasant with no member suffering undue depression; the tics should be absent.

A follow-up interview 3 months later confirmed the impression of real change in the family and its members. At this interview the girls were more relaxed and

interacted more freely. The family began by describing a recent incident when June was out with Margaret. Margaret had tried to take over the parental role, telling June not to eat chewing gum just before dinner. In order to change the subject June got Margaret to race her home, but June slipped in the mud and got quite plastered in mess—so much so that she felt quite unable to cope. This was recounted with much amusement. Margaret at this point stopped fidgeting and pointed out that she had helped June by picking up the shopping and making her a cup of tea. Therapist A suggested that it was as if June really felt knocked out of her grown-up role and thrown in a baby one, and half-expected Margaret to pick her up. The family laughed at the incongruity. Both June and Alice then talked about their grown-up activities. June described her recent boy-friend and Alice her drama classes. Margaret had also shown she was more grown-up: once her parents had forgotten to collect her from her girl's club and instead of just sitting down and crying as she would have done previously she telephoned to remind them. The interview contained much less mutual criticism although Mother felt that Margaret was more provocative and sometimes more babyish. The tics were much reduced. The family did not wish further help but wanted to keep a line open to the therapists if necessary.

Conclusion

In this family the focal plan was aimed at promoting freer communication, increasing mutual appreciation, and loosening inhibition of feelings. It was adhered to and succeeded in considerably alleviating the presenting symptom (tics), releasing the maturation processes in the "well" siblings, and permitting the parents a closer relationship with each other and a more realistic and gratifying relationship with their children, particularly with respect to fostering their emotional growth and development. Limitations are clearly apparent: the symptom is not totally removed, marital difficulties are still present, and individual members are still struggling with significant emotional problems. This family was given a rating of "some improvement"—on our scale of "no improvement", "some improvement" and "much improvement", and Margaret was rated as "much improved".

CASE 2: RACHEL AND HER PARENTS

Family

Rachel was a 5 yr old girl with a sister, Beth, 2 yr younger. The parents are in their early 30s and work professionally, having been brought up and trained abroad.

Referral

Rachel was referred with temper outbursts and excessive fearfulness and anxiety. Initially the case was dealt with by providing individual therapy for Rachel. Over 6 months a social worker saw mother or father (depending on who brought Rachel up for her session). However, while Rachel made good progress, the parents became increasingly disturbed. Both parents formed intense and somewhat sexualized relationships with the social worker and the mother became increasingly dependent. It was felt that such strong feelings might be appropriately directed towards each other rather than to the social worker who was not seeing them in a therapeutic

setting which permitted resolution. Conjoint meetings including both parents, the social worker and a psychiatrist were arranged specifically to work on these problems after individual therapy with Rachel ceased. Beth's development and psychiatric status were within normal limits and as the focus was a marital one it was decided not to involve her in specific treatment.

Salient facts from the history

Both parents had major difficulties in their families of origin. Father's father, a school headmaster, was often absent during his childhood, and his mother was depressed and suicidal for many years. Mother, in her family, had always felt pushed out by a younger sibling, and her father had been absent also while being idolized by her mother. She denigrated her mother but felt identified with her. Both Rachel's parents found a solution (partially) in their work, and used their work role as a source of identity and a means of valuation as individuals. Even after marriage they had continued to use people, work and situations outside the marriage to obtain satisfaction for their needs, and did not turn to each other. Both worked very long hours, father especially leaving mother at home alone and depressed. They led separate lives.

Observations of marital interaction

Neither parent perceived the needs of the other and both avoided communicating about their own needs and pain. They expressed intense anger about their parents, their marriage and the therapists in a messy way, scattering cigarette ash around the room and using sexual talk similarly. Simultaneously they were frightened of the damage they might cause. They were unable to help each other; each emphasized his own vulnerability while being patronizing and critical of the other.

Dynamic hypothesis

Both parents have been unable to find their own identity and have obtained security via self-idealization. Each is frightened of intense primitive rage and neither is able to see the other in a real and caring way.

Focal plan

It took a number of sessions to formulate the above hypotheses and develop a workable focal plan. It was decided that the therapists should aim at making the therapeutic situation a containing environment where better communication could be established with consequent reduction of primitive fears, opportunity for contact with each other's personal reality, and the possibility of sharing and mutuality. Contact with their own capacity to care would both enable them to support each other and permit greater responsiveness to the children. It was decided that meetings should be held weekly for 6 months.

Developments in treatment

Not surprisingly, the focal plan was not easy to implement. Both parents wanted to be therapists: father was critical and mother patronizing, and the sessions were initially vague, messy and permeated with hostility. Mother was particularly angry

about having to share the sessions and give up her idealized relationship. She had affairs which upset the marriage as well as disrupting the basis of the focal plan. Father was no less disturbed. Both showed defensive play-acting in the sessions with little openness or change in their behaviour and ways of relating. They initially pretended to meet the focus while looking for magical solutions outside the marriage as they had always done. Mother was pushed by father into the "sick role" and used it to gain attention.

An extract from an early session exemplifies the issues: Father reported his absolute fury and anger at finding that his wife was having an affair with a man whom he sees as being in a position of responsibility. He stated that he was so furious that he thought of leaving his wife, writing to the man (her boss) and "bashing him up". By the time of the session he just wanted to get rid of such awful feelings. He described his idea of marriage: an ordinary ideal everyday middle-class existence with extra stimuli from intellectual things and with each partner making the other stronger and cutting out weaknesses and failings. Therapist C queried the possibility of strength being built up by meeting each others needs rather than ignoring them. While father was saying that needs were not important, the therapist believed that weaknesses were just as important as strengths. Mother was distressed that therapist D did not share her view that there was nothing to apologize for over the whole affair. She suggested that forgetting was the best way of coping with anger and perhaps she just needed another man: Father had been unfaithful and she was just testing him to see if he cared. She knew that what he wanted was what she did not want. She wanted to be herself. Therapist C suggested that perhaps she did not really want to be married at all, and that there had been a good deal of deception and falsity in the marriage—playing at being married. Mother agreed that she liked to seem close to her husband in public, whilst being very distant at home; and father said that he was not ready for marriage. Both felt that there were many skeletons in both their cupboards. The therapists emphasized that despite its hurtfulness, Father's anger about the affair had not been destructive but rather evidence that he cared and provided attention for her. Mother claimed it was the attention that a naughty girl got from father and not the response she expected from a husband.

The next extract from a session about 2 months later shows the beginning of change which subsequently progressed further: Father stated that "when we talk, we block about needs—we don't seem to get anywhere". He then asked mother what her needs were. Mother replied "Can't we talk about them later? . . . well I need tenderness". Father said that he needed commitment. Mother then spoke about how unsatisfied she was with her mother, and therapist C referred to the difficulty she had in foregoing her individual sessions (with therapist D) and wondered about dependency. Mother reacted strongly: "dependency!? a horrid word—surely we don't have to be dependent on each other?" Father asked what was wrong with dependency and mother replied that it meant being controlled—people who are dependent on her are so puny and they are demanding and she cannot bear demands. She preferred angry people and then she could respond. Therapist C then pointed out that she seemed to perceive dependency as controlling and being controlled, overwhelming and being overwhelmed, and involving total sub-

mission rather than a part of herself being dependent on her husband and part of her husband being dependent on her. Father then asked "Why, if you are so afraid of dependence, why do you stay with me?" Mother broke down in tears and sobs, acknowledging she wants her husband, likes him, and really is dependent on him. Father moved his chair so he could comfort her and though mother said she liked it, she simultaneously shifted her position so that she was turned away from him. Her non-verbal contradiction of her verbal acceptance was made explicit in the therapy, and discussed.

Therapy was completed in 6 months as planned, and over this time communication improved and became more real and direct. The couple ceased attacking each other, and reduced their mutual denigration, hence they could move closer together. Their capacity to care for each other increased and at the end of the period, Mother became pregnant. Trust remained fragile and communication at times was difficult. Both showed changes as individuals: Father becoming more open, and Mother less attention seeking.

Short-term follow-up

In the case of Rachel's family the criteria derived from the focal hypotheses would be: the parents should obtain need gratification within the family as indicated by spending time together with pleasure; practical and emotional support should be evident; the parents should be able to describe themselves and each other in a realistic and sympathetic way; no member should be symptomatic.

At 5 months after the last session most of these criteria were met. Rachel's symptoms were fully abated, Beth continued well, Mother was enjoying domestication, and Father though angry and authoritarian was good humoured. The parents remained able to discuss problems and see each others point of view, sharing conflict and giving in when necessary.

Conclusion

Following a period of individual treatment of the child, marital problems became evident. Although a simple operational focus could not be defined, a plan was devised which enabled the therapists to sustain a therapeutic relationship and help the parents examine the similar personal problems which led them to marry and inevitably run into difficulties. The dynamic hypothesis guided the interventions which consistently aimed at confronting the idealized expectation of the other, and revealing each as a real person with needs which could be meaningfully gratified within the marriage. In this case both the family and the index patient received ratings of "much improved".

DISCUSSION

The two cases described above demonstrate the applicability of a time-limited active focal approach. The first case described was an integrated family with high motivation for change. The members showed willingness to accede to therapist directions and had no difficulty in accepting the authority of the therapist. The presenting symptom could be easily linked to family stresses, and the nature of the

stress as experienced by individual members was in terms of easily understandable emotions. The required changes in interaction were not difficult to define and once the family were in a working alliance simply indicating problems led to alterations in family functioning. In the second case the therapists were faced with a quite different situation. Both parents were suffering from severe characterological disturbances and the marital relationship had few positive qualities for the therapists to begin work with. A simple description of dysfunctional aspects was impossible and the setting up of a working alliance was not to be taken for granted. It took longer to formulate a meaningful dynamic hypothesis and focal plan. Each of the parents were seen as similar: ignorant and frightened of their own needs and infiltrating their interactions with primitive aggression. The treatment focused on helping them form a real relationship rather than altering a number of unhelpful interactions. Not surprisingly more intensive work was required: 25 weekly sessions.

Other cases seen in the workshop improved as much as, or more than, the cases presented here; but many did not. This paper aims at characterizing the approach which we are convinced is a worthwhile and important one. It is not possible to comment in detail on the technical aspects of the work. The therapists were psychoanalysts, psychiatrists, psychologists and social workers, and their backgrounds and styles varied considerably. Using the criteria of the G.A.P. Report (1970) they were Position M therapists. They encouraged interaction between family members and took up verbal and non-verbal aspects of the interaction. The experiences and problems of individuals were not avoided but related to the family context and to other family members. The psychoanalytic method of connecting present feelings, thoughts, and behaviour patterns to past events and experiences in the family and to aspects of the families of origin was used and found to be helpful. The therapists aimed to foster integration for the individual members as well as for the family, and also to provide the opportunity for corrective experiences. They provided education about developmental and emotional factors in family life, set tasks, modelled parental roles, and used challenges to dysfunctional value systems. The most characteristic aspect of psychoanalytic therapy—vigorous and detailed examination of the transference—was not a feature of the work, although working with marital couples brought such issues more to the fore where they could not be ignored. The various specific techniques currently being developed by family therapists (e.g. sculpting, genograms, videotape feed-back) were not used, though they are clearly adaptable for the type of approach described here.

We agree with Rosenthal and Levine (1970) that the high therapist motivation for short-term work, the pressure due to the time-limit, the collaboration between family and therapist, the clear definition of goals, the clarification and use of family strengths, and the open invitation to the family to return if necessary are all major factors in the success of a brief approach. Goals, by themselves, are not enough to guide the therapist as it is commonly not apparent why the family members let themselves persist in interacting dysfunctionally. The perception of a "workable/meaningful focus" is an important aid to the therapist enabling him to use his skills and abilities without the diffusion of effort or inappropriate narrowing of attention which can occur so easily in work with families. Although our therapists have had considerable experience in many forms of individual and group treatments of vary-

ing orientations, none have had formal training in family therapy—for which, in any case, no standard technique has emerged. The focused approach became an easily assimilated “technique”. A further factor in our success in this venture requires mention: the workshop. Malan (1963) indicated the power of the group to foster a particular philosophy and way of working. Not only does the discipline of having one’s work scrutinized increase involvement and enthusiasm for the work itself, but its supportive (and sometimes critical) function enables the therapists to maintain role and not drift into colluding with the family system or lose the focus. Sharing one’s knowledge of the family and reporting sessions enables transference and countertransference difficulties to be more rapidly recognized. They need to be understood and dealt with, even though they will usually not be interpreted to the family. At this stage we cannot know how far being a workshop member increased the effectiveness of the work, and whether the skill of recognizing and pursuing a workable focus without support and lengthy discussion has been retained.

CONCLUSION

This paper describes a style of family work which initially derived from the brief individual psychoanalytic therapy developed at the Tavistock Clinic by Malan and co-workers. The approach is highly suitable for use in busy Child Guidance Clinics where the alternatives are no treatment at all, or occasional supportive interviews with counselling. Even where resources are available, the method may prove a treatment of choice offering an opportunity for the improvement of the context of the individual’s emotional life. The approach emphasizes seeing the whole family or marital couple, determining a few dynamic hypotheses which organize the salient facts from the history with observations of family interaction, and then constructing a focal plan. This plan links with the hypotheses but is operational and serves as a guide and reference point for the therapist in his work with the family. The frequency of sessions varies from once- to six-weekly, and period of contact is between 3 and 9 months. The therapeutic technique is an active one which does not rest on any rigid theoretical ideas. A contract and working alliance are set up in the initial sessions which also provide further opportunity for alteration of the hypotheses or plan. The role of the workshop group in supporting the therapist and helping the therapeutic work is emphasized. Two cases with very different psychopathology and family pathology have been described as examples of the clinical process.

SUMMARY

The development of a method to carry out time-limited focused work with families is briefly described. Two case examples are provided to demonstrate the process of formulation of dynamic hypotheses, the development of operational plans for therapists, and the changes in the family with therapy. The value of the method and the importance of the workshop where it is being fostered and documented is discussed.

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STIMULANT EFFECTS ON COOPERATION AND SOCIAL INTERACTION BETWEEN HYPERACTIVE CHILDREN AND THEIR MOTHERS

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STUDIES of how parents interact with behaviorally disordered children are typically subject to circularity with respect to cause and effect. Given that there is an association between a particular style in the child and a particular style in the parent, does the parent's style represent a response to deviance in the child, or was the parent's style antecedent to or even the cause of the child's deviance? In the absence of detailed and accurate historical information (which can rarely be obtained in retrospect), there is no way of resolving this circularity. Investigators then retreat to theoretical positions which, however, cannot be justified empirically. It would be different if it were possible to improve abruptly a child's behavior and note whether the parent's behavior immediately accommodates itself to the new situation, or whether it persists in its previous characteristics. If the former is the case, then the parent's behavior is to be regarded as response. If the latter is the case, then parental style at least could still have been antecedent to the child's disorder.

In the context of investigating the effects of stimulant medication on hyperactive children's behavior, we have developed a paradigm for resolving this circularity. The characteristics of mother-child interaction in the unmedicated child are noted. Within an hour or two of the acute administration of a single dose of stimulant, the child's performance on a task improves and any corresponding change in the parent-child interaction can be noted.

The primary behavioral characteristic of the hyperactive child is an impulsive style (Laufer and Denhoff, 1957; Douglas, 1972; Sykes *et al.*, 1973). This impulsivity can be manifested as excessive motor activity, an inability to sustain attention which presents as distractibility, and impulsiveness in social interactions which can result in antisocial behavior.

Several recent investigations have focused on the nature of the interaction between hyperactive children and their mothers. Compared to mothers of children categorized as normal, or children suffering from a specific learning disability not involving hyperactivity, the interaction pattern exhibited by mothers of hyperactive children has been characterized by significantly more attempts at control, direction and, in general, structuring of their children's behavior (Bing, 1963; Bee, 1967; Campbell, 1973; Campbell, 1975).

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Accepted manuscript received 16 August 1977

These findings have pointed to hyperactive children's perceived need for external control and/or their mother's need to exert control over them for the purposes of socialization or having them achieve (Campbell, 1973, 1975). The data leave unanswered the question of whether the nature of this mother-child interaction is modifiable by a drug-induced reduction of the symptoms of hyperactivity in the children. Does reducing the impulsivity of the hyperactive child by administering stimulant medication (methylphenidate) lead to an improvement in the performance achieved by him and his mother on a task which requires them to work cooperatively to reach a common goal? In addition to an improvement in performance, is the effect of medication to also promote more favorable social interaction between the hyperactive child and his mother? The present study investigated these questions within the context of the "one-dose, double-blind paradigm", a methodology developed and employed in the Neuropsychology Research Unit of The Hospital for Sick Children.

Previous work by our group (Kinsbourne, 1973; Swanson and Kinsbourne, 1976; Swanson *et al.*, in press), has demonstrated that the typical effect of medication on behavior can be observed after a single (acute) administration of methylphenidate. All studies we have conducted to date utilized tasks which focus on the effect stimulant medication has on the learning ability of hyperactive children. For the present experiment, a task was designed to measure the socially relevant variable of mother-child cooperation in the "one-dose, double-blind paradigm".

A commercially available toy, the Etch-A-Sketch, was adapted to present a two-dimensional, "self-paced contour tracking task" (Poulton, 1969) requiring the child (patient) to use both hands to control horizontal and vertical movements in navigating a maze. Humphries (1976) found that hyperactive children working alone on this task performed better when on medication than on placebo.

The present study extended the use of this instrument to involve the participation of a parent: one dimension of the contour tracking task was controlled by the child's mother and the other by the child. Thus, cooperation was necessary in order to stay within the boundaries of the maze and thereby reduce errors. This allowed us to measure the effect of stimulant medication on behavior, employing a task in which both the mother and the child were actively involved in producing a measurable performance, rather than measuring the performance of the child alone as has been the case in our previous work.

The task also corrected for a deficiency in previous studies of mother-child interaction. In past investigations (Bee, 1967; Campbell, 1973, 1975), children have typically been given a task to perform independently, while their mothers received instructions to assist them as much or as little as they wished. A bias may have resulted in which the opportunity for observing any spontaneously occurring instances of mother-child interaction was confounded by the mothers being forced to reach a decision about whether they should "intrude" on their children's activity.

The present study removed the necessity of intrusion, by assigning the children and mothers equal responsibility for completing the task from the outset of their performance.

METHOD

Subjects

The subjects were 26 children diagnosed as "hyperactive" according to objective test procedures administered in a double-blind manner in the Neuropsychology Unit. All 26 children performed better on a paired-associate learning task (Swanson and Kinsbourne, 1976) when tested on medication than when on placebo. The nature of the paired-associate task and the performance on it of the subjects in the present study are described in detail in Swanson *et al.* (in press). A more detailed analysis of the favorable effect of stimulants on the performance of subjects on the paired-associate learning task has also been reported in Dalby *et al.* (in press). In our unit this task has been accepted as an external criterion for identifying hyperactive children who are "favorable responders" to stimulant medication and allowed us to exclude those hyperactive children who are adversely affected by stimulants. We are currently investigating the validity of this procedure with respect to long-term management.

In the present study, the diagnosis of favorable responders on the paired-associate task in the laboratory was further confirmed by a 3-week follow-up in which parents and teachers were able to report that the children also responded favorably to stimulant medication in the home and at school. Eighteen of the children were boys and eight were girls. Their mean age was 10.2 years with a standard deviation of 2 years. All children had a Full Scale I.Q. of 80 or above on the Wechsler Intelligence Scale for Children—Revised (WISC—R).

Approximately 30% of the children referred to the Neuropsychology Unit with symptoms of hyperactivity are classified as adverse responders by our procedures. Stimulant therapy is not instituted in these cases and the adverse responders were not investigated in the present study.

Apparatus

Two different types of mazes were drawn in red ink on clear sheets of acetate. Maze I consisted of alternating horizontal and vertical alleys which proceeded in step-like fashion from start to finish. Maze II was comprised only of diagonal alleys arranged in saw-tooth fashion and drawn at an angle of 45° to the horizontal. The width of the alleys in both mazes was a constant half a centimeter. A schematic representation of the two mazes appears in Fig. 1.

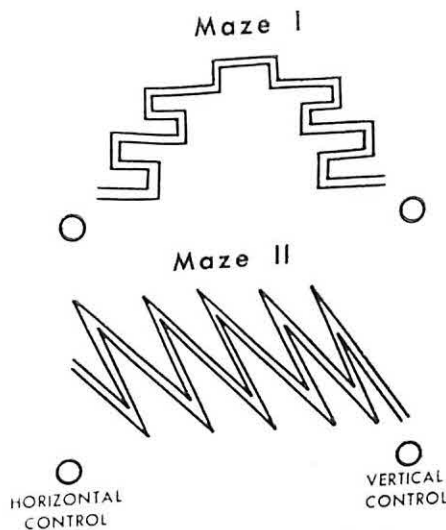


FIG. 1. Levels of maze difficulty.

Each of these mazes was mounted on the blank screen of an "Etch-A-Sketch" toy. An Etch-A-Sketch consists of a plastic frame enclosing an 18 × 13 cm rectangular screen, below which are located two control dials. Turning the left dial produces a horizontal line on the screen. Turning the right dial produces a vertical line. To produce a diagonal line, both dials must be turned simul-

taneously. Maze I requires alternating responses by the two partners. Mother and child complete their respective horizontal and vertical segments independently of each other, so cooperation on this task required only that a partner wait until the other participant finished before operating the alternate control. Maze II involved a more continuous, coordinated response by the partners due to the simultaneous effort needed to follow a diagonal path.

Procedure

A double-blind, crossover design was followed on an initial practice day and on a second data collection day. The purpose of the first day of testing was to give the subjects practice in working toward an asymptotic level of performance on the task, as well as to dispel any initial anxiety associated with the testing situation. This permitted measurement of the effect of medication on the second day relatively independent of the possible confounding influence of learning and anxiety.

On each day, both drug and placebo states were established (one in the morning and the other in the afternoon) by administering a clinically effective dose of methylphenidate (average dose 12.5 mg) or an equal amount of placebo, 30 minutes before breakfast and 30 minutes before lunch. Testing followed approximately 1 hour later. Methylphenidate apparently has a restricted active life, but an analysis of serum half-life in children has not been reported. However, behavioral time-response curves (Swanson *et al.*, in press) confirm the widespread clinical impression that, when taken orally, it starts to control hyperactive behavior in about 30 minutes and its effective duration is about 4 hours (Wender, 1971; Cantwell, 1975; Safer and Allen, 1976). These properties make it possible to establish alternate states (drug/placebo) within an individual in a single day.

Each mother and child were seated side by side at a table, the child on the right and the mother on the left. Instructions were identical for both Maze I and Maze II.

By turning the dials on the Etch-A-Sketch, I would like the two of you to make a line going through this path from start to finish. You may take as much time as you wish to produce this line, but try to make as few mistakes as possible. A mistake is when the line the two of you are making goes outside the path like this. If you make a mistake, get back inside the path where you make it and keep going until you finish.

To play this game, I want you (the child) to turn this dial on the right which only makes the line go up and down like this. Your mother will work this dial on the left which only makes the line go sideways, back and forth like this. I want you to each work your own dial only. You are not allowed to take over each other's dial, but you can say whatever you want to each other in order to get to the end of the path.

While a mother and her child were completing the mazes, the experimenter observed their interaction and recorded the following dependent measures. The percentage of agreement obtained between two independent observers in recording these dependent measures on both Maze I and Maze II, is reported in Table 1.

1. Time: the time taken to complete each maze was measured with a stopwatch.
2. Errors: the number of errors made on each maze was recorded. An error was counted whenever the line being produced overshot the boundaries of the path. An error was not counted if the line was judged to fall directly on the path boundary.
3. Verbal directions: a record was made of the number of verbal directions that mother and child gave to each other while completing each maze. Only utterances classifiable as obvious commands were recorded (e.g. Stop, Go, Turn, Slow Down). Vague comments like OK, All right, and Hey, were not recorded.
4. Praise and criticism: the number of times a mother and child praised and criticized each other's performance was recorded. Praise was defined as any clearly favorable, complimentary judgement made about one's partner's performance. Criticism included any unfavorable, derogatory judgements.

Design

The order of administration of medication was counterbalanced between subjects. Thus, order was the between subject variable. Half of the subjects received the order drug → placebo, while for the other half, the order was placebo → drug. Task (Maze I or Maze II) and drug state (placebo or methylphenidate) were the within subject variables.

TABLE 1. PERCENTAGE OF INTER-OBSERVER AGREEMENT FOR INTERACTIONS VARIABLES ON MAZE I AND MAZE II

Variable	Maze I	Maze II
Time	99.5	99.2
Errors	100.0	96.0
Mothers' directions	83.0	99.1
Children's directions	96.5	97.6
Mothers' praise	20.0	57.1
Children's praise	33.3	57.0
Mothers' criticism	62.5	92.0
Children's criticism	95.2	83.7

RESULTS

Table 2 presents the means and standard errors of the means for each of the eight dependent measures investigated in the four medication $\times$ maze type combinations (drug-Maze I, placebo-Maze I, drug-Maze II, placebo-Maze II). Since the standard deviations were proportional to the means, a log transformation was applied to the data before analyses of variance were performed. A univariate analysis of variance was carried out for each transformed dependent variable. The significant effects of these analyses will be discussed in turn.

Main effect of drug

The effect of medication (see Table 2) was to improve performance on all dependent measures except the time measure. In terms of differences between drug and placebo performance, this reflected a decrease in mother-child errors in the medicated state ($F = 27.19$, $df = 1/24$; $P < 0.001$), a decrease in mothers' directions to their children ($F = 25.65$; $df = 1/24$; $P < 0.001$), an increase in children's direction to their mothers ($F = 22.79$; $df = 1/24$, $P < 0.001$), an increase in the amount of praise both mothers ($F = 7.61$; $df = 1/24$; $P = 0.011$) and their children

TABLE 2. MEANS AND STANDARD ERRORS OF INTERACTION VARIABLES ON MAZE I AND MAZE II IN PLACEBO AND DRUG CONDITIONS

Variable	Placebo				Drug			
	Maze I		Maze II		Maze I		Maze II	
	M	SE	M	SE	M	SE	M	SE
Time	147.27	7.04	331.50	26.72	147.62	5.36	352.58	35.55
Errors	2.69	0.77	20.73	3.10	1.19	0.30	9.42	2.52
Mothers' directions	6.77	1.48	20.19	2.68	2.96	0.69	8.08	1.65
Children's directions	1.58	0.31	5.81	1.26	3.77	0.62	11.19	2.88
Mothers' praise	0.19	0.10	0.23	0.13	0.54	0.24	0.96	0.25
Children's praise	0.00	0.00	0.08	0.08	0.38	0.13	0.65	0.33
Mothers' criticism	0.69	0.21	2.31	0.60	0.00	0.00	0.12	0.08
Children's criticism	0.58	0.21	2.92	0.49	0.04	0.04	0.31	0.13

($F = 7.24$; $df = 1/24$; $P = 0.012$) gave to each other, and a decrease in the amount mothers ($F = 30.03$; $df = 1/24$; $P < 0.001$) and children ($F = 34.82$; $df = 1/24$; $P < 0.001$) criticized each other. An increase in the time taken to complete the task was associated with the overall pattern of improvement (reflected by the other seven dependent variables) for some subjects, but for other subjects, a decrease in time accompanied this pattern of improvement. The net result was that the time variable showed no significant effect of medication ($F = 0.40$; $df = 1/24$; $P = 0.53$).

Main effect of order

The main effect of order was not significant for any of the dependent variables.

Main effect of task

The results for Maze I and Maze II differed significantly for six of the eight dependent variables. The praise given by mothers to their children ($F = 3.80$; $df = 1/24$; $P = 0.06$) and children to their mothers ($F = 0.64$; $df = 1/24$; $P = 0.43$) did not differ significantly for the two types of mazes, although the trend was for more praise to be given by both partners on Maze II. The effect of task could not be clearly interpreted for praise given by mothers because of a drug $\times$ task interaction.

The remaining six variables revealed the following pattern: more errors occurred on Maze II ($F = 98.59$; $df = 1/24$; $P < 0.001$), Maze II took longer to complete ($F = 94.63$; $df = 1/24$; $P < 0.001$), more directions were given by mothers ($F = 47.93$; $df = 1/24$; $P < 0.001$) and their children ($F = 15.73$; $df = 1/24$; $P = 0.001$) on Maze II, and mothers ($F = 11.54$; $df = 1/24$; $P = 0.002$) and children ($F = 31.25$; $df = 1/24$; $P < 0.001$) criticized each other more on Maze II.

Drug $\times$ order interaction

The interaction of drug $\times$ order was significant for the measure of mothers' directions ($F = 5.80$; $df = 1/24$; $P = 0.02$), time ($F = 22.36$; $df = 1/24$; $P > 0.001$) and children's criticism ($F = 5.63$; $df = 1/24$; $P = 0.03$). These significant effects indicated that when placebo is given after drug, there may be a lingering effect of medication which produces a drug $\times$ order interaction. In the present study this effect was not large enough to attain statistical significance for all the dependent variables. In our previous work using other tasks, this same pattern has emerged but has been a small effect (Swanson *et al.*, in press; Dalby *et al.*, in press).

Drug $\times$ task interaction

The interaction of drug $\times$ task, which qualified the interpretation of main effects, was significant for the measure of errors ($F = 13.31$; $df = 1/24$; $P = 0.001$), mothers' praise of their children ($F = 4.58$; $df = 1/24$; $P = 0.04$), mothers' criticism of their children ($F = 6.82$; $df = 1/24$; $P = 0.02$), and children's criticism of their mothers ($F = 20.90$; $df = 1/24$; $P < 0.001$). The effect of medication on the error measure of performance was greater for Maze II than Maze I. This significant interaction was not due to differences in the variability associated with low and high means, since the transformation effectively equalized the variance. There was no difference in the amount of praise given by mothers on Maze I and Maze II in the

placebo condition, when little praise was given; but in the drug condition, mothers gave more praise on Maze II than Maze I. For both mothers' and children's criticism of each other, there was little difference in criticism between Maze I and Maze II in the drug condition, when little criticism occurred; but in the placebo condition more criticism was given by both partners on Maze II than on Maze I.

Drug $\times$ order $\times$ task interaction

A significant drug $\times$ order $\times$ task interaction was obtained only for the measure of children's directions. On Maze I there was no difference in children's directions in the drug condition for the two orders, but in the placebo condition, more directions were given when the order was drug $\rightarrow$ placebo as opposed to placebo $\rightarrow$ drug. For Maze II, there was no difference in the two orders for the placebo condition, but in the drug condition more directions were given in the drug $\rightarrow$ placebo order than in the placebo $\rightarrow$ drug order. No explanation could be found for this complicated pattern of results.

DISCUSSION

Previous studies have revealed the considerable amount of control mothers attempt to exert over their hyperactive children (Bing, 1963; Bee, 1967; Campbell, 1973; Campbell, 1975). The present investigation clarifies this effect by demonstrating how mothers' felt need for such control can be significantly reduced by a single, acute administration of stimulant medication (methylphenidate) to the children. Furthermore, this improvement of the interaction between mothers and their hyperactive children was obtained not only for relevant aspects of social interaction which have been the primary focus in past research, but also on a performance measure that investigated the effectiveness of the mothers and their children in working as a team to achieve a common goal.

When the hyperactive children were in a medicated as opposed to a placebo state, they and their mothers made fewer errors on a maze tracking task, praised each other more, criticized each other less, the mothers gave fewer directions to their children about how to complete the task, and the children gave more directions to their mothers. Due to the fact that some mothers and their children performed at a faster pace in the drug condition than in the placebo condition, while others performed more slowly when the children were on medication, there was no significant difference in the time taken to complete the task for the drug and placebo states.

Bee (1967) observed the interaction of a group of "distractable" children and a second group of "non-distractable" children, with their mothers. Her conclusion was that distractible children are exposed to a relatively greater degree of maternal control and, accordingly, receive less training in how to function independently. Campbell (1973) pointed out that mothers exert more control over their hyperactive children particularly when the latter are engaged in relatively difficult tasks and concluded that the mothers were responding to the child's situation rather than exerting a causal effect. Our findings are consistent with Campbell's in that the mothers gave three times as many controlling instructions in the placebo condition when they and their children were working on the more difficult maze (Maze II), as compared to the relatively easy one (Maze I). More impressive, however, is the

abrupt decline in the extent to which mothers exert control with regard to both mazes when the children were on effective medication.

The present findings provide a dramatic illustration of how the administration of stimulant medication can result in more independent functioning by hyperactive children, characterized by an improved ability to give constructive task-relevant suggestions to their mothers in an atmosphere of greater praise and less criticism. Correspondingly, a demonstration is also provided of the mother's sensitivity to their hyperactive children's new-found control when on medication. In the drug condition, rather than continuing to dominate their children with many directions as they did in the placebo condition, the mothers responded to their children's positive contribution by giving fewer directions of their own, more praise, and less criticism. The more difficult maze still elicited more errors and more controlling instructions from the mother, but the decrease in maternal control (which was actually overtaken in amount by the rising incidence of control exerted by the child) vividly illustrates the parent's ability to relinquish control as soon as the child's behavior makes this possible.

Such adaptability makes it difficult to argue that, by their nature, mothers of hyperactive children are inflexible individuals who maintain rigid control over their children, thus causing the children to rebel and behave in a disruptive manner. This point is particularly impressive in view of the fact that this adaptable change in style occurred within just a few hours following the administration of stimulant medication. Thus, it becomes increasingly clear that the mother's control does indeed represent a response, secondary to the child's disordered behavior, and cannot justifiably be regarded as antecedent to that behavior or in any way as causing it.

The finding that some mothers and their children increased the pace of their performance in the drug condition, while others reverted to a slower pace, raises the possibility that certain of the hyperactive children in this study may have differed in the degree to which they are distractible versus impulsive. Results from the Etch-A-Sketch task, and several other tasks in our laboratory on which hyperactive children perform alone, have revealed that some children are easily distracted, slow to respond and frequently inaccurate in their responses when in an unmedicated state, but that these children respond faster and more accurately in the drug condition. Other hyperactive children whose style is to respond impulsively, and therefore often erroneously when off drug, respond more slowly and also more correctly when medicated.

This differential effect that stimulant medication has on the performance style of different hyperactive children suggests that a similar difference in cognitive styles along the impulsivity-distractibility dimension could have existed for the hyperactive children in the present study. This may account for the two contrasting patterns of task completion times observed in the drug condition, but further work is necessary to evaluate this hypothesis.

The differences in performance obtained between Maze I and Maze II that were independent of the drug effect, reflect the difference in the difficulty level of these two mazes. The finding that mothers and their children performed more poorly on Maze II and interacted less well socially, highlights the situational

nature of the effect that the children's hyperactivity can have on their ability to interact with others. It is not so much a matter of hyperactive children being unable to cooperate with others in any situation, but more specifically in situations which leave little room for them to behave in an impulsive and distractible manner.

While mothers and their hyperactive children criticized each other more on Maze II, where their ability to cooperate received its most stringent test, no significant differences were noted in the extent to which they praised each other on the two mazes despite the fact that they made fewer errors on Maze I than Maze II. Thus, when considered independent of the effect of drug, this finding casts the nature of their general manner of interacting in a rather negative light. Even though a particular situation may promote better cooperation between them and lead to less criticism on the part of both partners, it may not necessarily result in more praise. The manner in which they typically reinforce each other seems primarily to vary along a continuum of more or less negative feedback with few supportive comments. A general bitterness is suggested, with neither mother nor child being willing to extend a compliment.

Certain of the situation-specific aspects of mother-child interaction were attenuated by an interaction of drug with task. The greater effect that medication had in reducing errors on Maze II, underscores the efficacy of this form of treatment in improving the ability of hyperactive children to cooperate with their mothers, particularly in the type of situation where such cooperation is hardest to achieve. The greater reduction in the amount of criticism given by both partners that also occurred on Maze II in the Drug condition, further testifies to the positive effect of stimulant medication in improving social interaction in a more difficult situation.

Perhaps most interesting is the finding that in the placebo condition very little praise was given by either of the partners, but in the drug condition mothers gave more praise to their children on Maze II than on Maze I. Greater maternal praise occurred on Maze II despite the fact that the mothers and their children were making more errors on this maze than on Maze I. Though the mothers must have recognized that they and their children were making more errors on Maze II, they apparently could not resist applauding the children's improved performance on this more difficult task in the medicated state.

Thus, the mothers appeared to give credit where they felt it was most deserved, rather than allowing their children's improved performance on medication to become an excuse for rewarding them no matter what the situation. The benefit of this to the hyperactive child could be to emphasize the value of continuing to exert a "good effort" over and above any positive effects on his performance that might accrue directly from stimulant therapy. Ultimately, a benefit of stimulant medication to the hyperactive child may be the opportunity that it creates for him to profit from this type of learning, which he might not otherwise be exposed to due to his inattentiveness and disruptive behavior.

SUMMARY

Twenty-six hyperactive children and their mothers collaborated on a contour tracking task with acute administration of stimulant (methylphenidate) and placebo

in a double-blind design. The dyad performed significantly better when the child was in the medicated state. Aspects of the quality and quantity of interaction between mother and child were noted. In the medicated state, the child directed the mother more and in a more positive fashion, while the mother behaved in a less controlling way and also more positively. We conclude that in the medicated state, a more favorable interaction is established, permitting less constrained learning on the part of the child. The findings make it unlikely that the controlling behavior of mothers of hyperactive children is anything other than a response to the way their children act.

Acknowledgements—This research was supported in part by a post-doctoral fellowship from The Hospital for Sick Children Research Foundation (TH), research grants from The Atkinson Charitable Foundation and The Connaught Foundation (MK) and a National Science Foundation/NATO fellowship (JS).

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DELETERIOUS EFFECTS OF CHRONIC UNDER-NUTRITION ON COGNITIVE ABILITIES

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THERE are numerous studies reported in the literature concerning the effects of malnutrition on various aspects of the psychological development of young children (Scrimshaw and Gordon, 1968; Hertzog *et al.*, 1972; Cravioto *et al.*, 1966; Werner and Muralidharan, 1970; Klein *et al.*, 1971).

At a symposium in 1973 sponsored by the Swedish Nutrition Foundation, it was concluded that "in spite of the widely-held and widely-publicized opinion that malnutrition in early life jeopardizes mental development, the evidence to support this opinion—especially that from studies conducted in man—is scanty. . . . There is practically no evidence of a relationship between the much commoner mild and moderate forms of malnutrition and mental retardation" (WHO, 1974). While Monckerberg *et al.* (1972), found significant differences in intelligence between lower socio-economic group children separated on the basis of nutritional level (i.e. good nutritional status and normal growth as compared to poor nutritional growth status), these differences were not attributed to malnutritional factors alone, but to a variety of cultural, educational and socio-economic factors.

The present investigation was an attempt to investigate a variety of cognitive abilities of lower socio-economic Nigerian children. In an attempt to isolate the role that malnutrition may play as one of the many variables known to be associated with retarded intellectual development, this group was separated into those who were poorly nourished and those who were reasonably nourished. Because black children are generally reported to perform very differently from Caucasians on a variety of psychological tests (Dreger and Miller, 1968; Jensen, 1973; Yule *et al.*, 1975), it was considered desirable to include a sample of black children who had had adequate nutrition and opportunity for development of cognitive abilities from infancy to serve as a control group.

METHODS

Subjects

The subjects were 118 black children between the ages of 2½ and 6 yr who came from "well-to-do" urban and "poor" urban and rural environments. Criteria for inclusion in the well-to-do group were

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that the children's nutrition and opportunities for stimulation of cognitive development should be fairly representative of a wide range of social classes. Forty-five children were selected from a private nursery school and from private families in Ibadan. [This well-nourished, well-stimulated group of children (WN) served as a control.] To obtain a representative sample of all social classes, selection included eight children of professional parents, 28 children whose parents were clerks, soldiers, policeman, tailors, etc., and nine adopted children whose parents, if known, were unskilled or semi-skilled. Four of the latter group were abandoned children.

Twenty-eight children ("Oje urban poor" group) were selected from the total "Oje" sample of the ongoing growth study in progress at the Institute of Child Health, University of Ibadan (see below).

Forty-five children ("Ilora rural poor") were selected from the environment of a Health Centre located 35 miles from Ibadan at a village, Ilora. Criterion for selection was that the child should have a known birth date. The life style and physical living conditions of these two "poor" groups were similar except that the rural people were farmers whereas the urban people were mainly traders.

The "Oje" urban and Ilora rural "poor" children were sub-divided according to their nutritional status, as judged by their height and weight measurements into:

- those who fell above the local "Elite" standard mean -2 s.d. for height and/or weight [the Reasonably Nourished (RN), $n = 28$].
- those who fell below the local "Elite" standard mean -2 s.d. for height and/or weight [Malnourished (MAL) $n = 45$].

The ages, sex and locality of the children are summarized in Table 1. Figures 1 and 2 show the range of height values for the boys and girls of the three different groups. Weight values tended to fall in the same pattern and are omitted here.

TABLE 1. DISTRIBUTION OF 118 SUBJECTS BY SOCIO-ECONOMIC GROUP, AGE, SEX AND LOCALITY AND GCI SCORES

	2 & 3 yr		4 yr		5 yr		6 yr		Total
	M	F	M	F	M	F	M	F	
"Well-to-Do" Urban									
Well-Nourished	7	5	7	4	9	4	4	5	45
"Poor" "Oje" Urban									
Reasonably Nourished	4	5	3	2	1	1	—	—	16
"Oje" Malnourished	6	2	4	—	—	—	—	—	12
Totals	10	7	7	2	1	1	—	—	28
"Poor" "Ilora" Rural									
Reasonably Nourished	1	1	2	1	5	2	—	—	12
"Ilora" Malnourished	4	4	9	8	4	4	—	—	33
Totals	5	5	11	9	9	6	—	—	45

Assessment of nutritional levels

It is a fair assumption that an individual whose physical growth is normal for his age, i.e. whose height and weight are within the mean ± 2 s.d. of an appropriate standard, has had adequate nutrition and medical care during his life. The height and weight of the children in the study were measured and compared with the local ethnic "Elite" and lower or "poor" socio-economic level standards. These standards were obtained from mixed longitudinal data collected between 1962 and 1970 on two groups of Nigerian Yoruba children (Janes, 1973). The "Elite" group (total number of 422) comprises children from well-to-do, mostly professional families in Ibadan. The poorer group "Oje" children (total number of 477) are from traditional, often polygynous households from a market area called "Oje" in the old part of Ibadan. The people live in tin-roofed, mud-walled houses

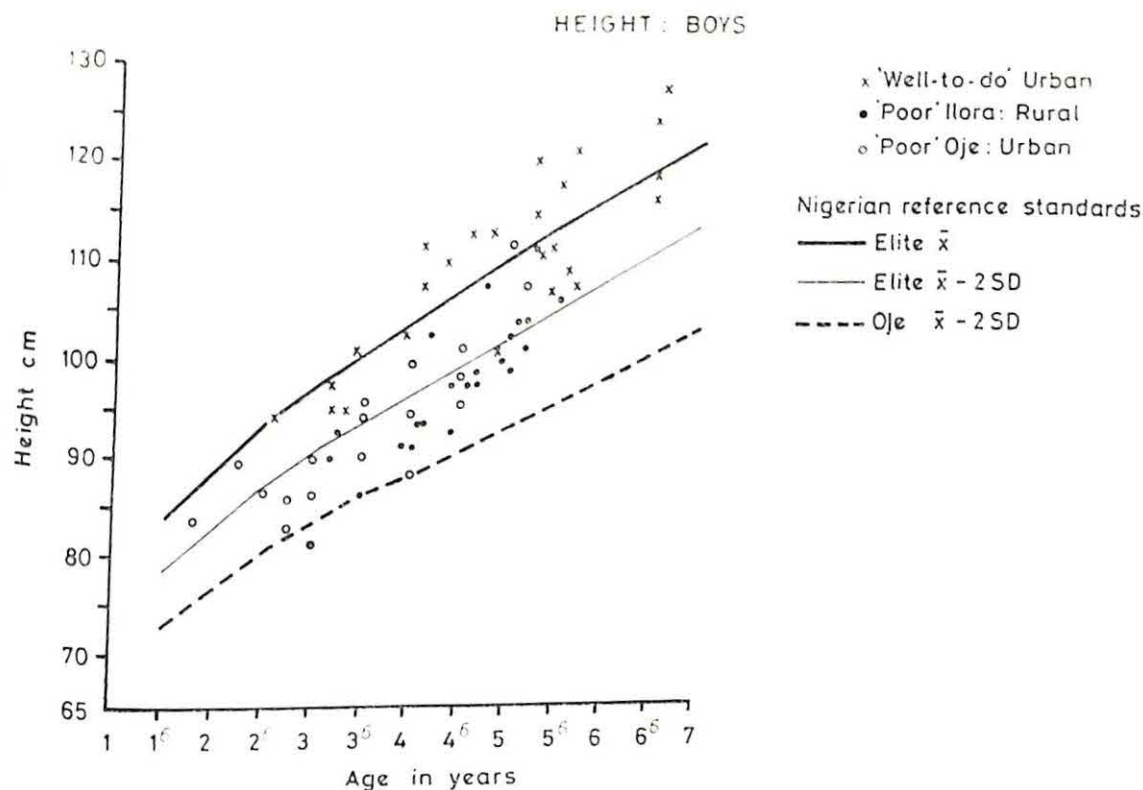


FIG. 1. Height of subjects (boys) plotted on Nigerian reference standard curves.

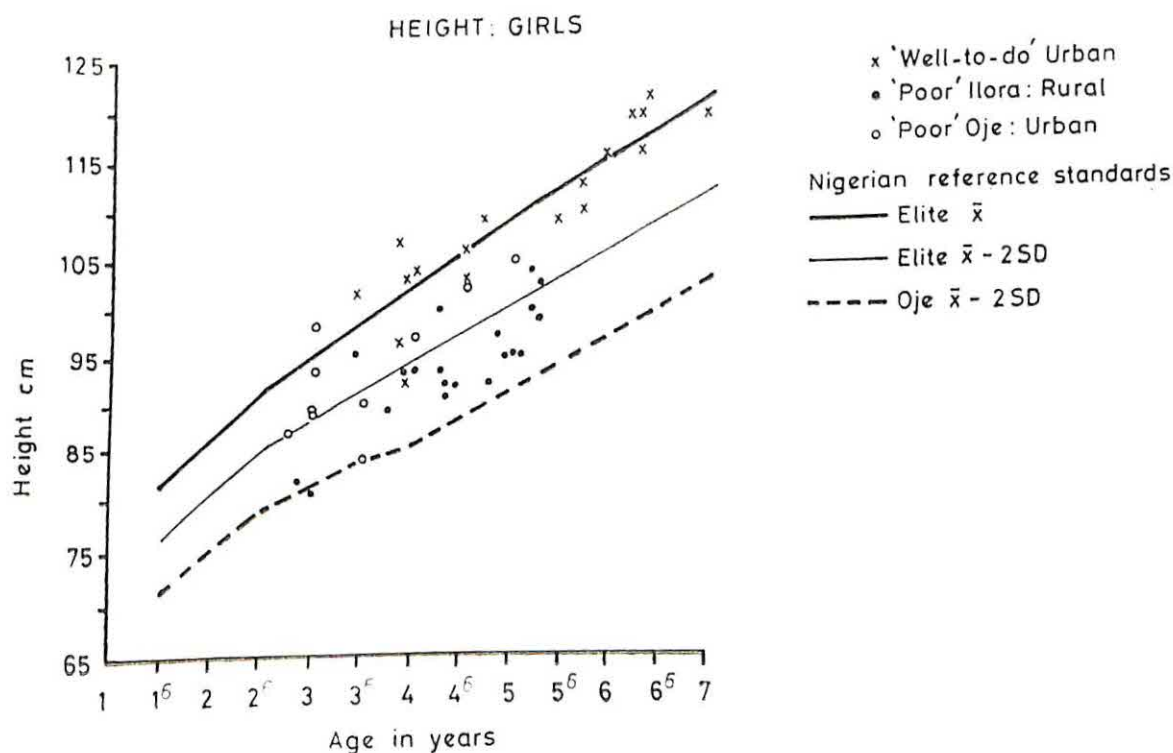


FIG. 2. Height of subjects (girls) plotted on Nigerian reference standard curves.

in large compounds. There is no sewage system and water is obtained from a few communal water taps. The parents have very little education and are very poor on the whole.

For the parameter of height, the "Elite" mean and "Elite" mean -2 s.d. are very similar to the British 50th and 10th centile respectively (Tanner *et al.*, 1966). The mean of the "Oje" group (main on-going sample) is also very similar to the "Elite" mean -2 s.d. It was thought reasonable, if slightly arbitrary, to use the latter to distinguish between those who were reasonably nourished (RN) and those who were malnourished (MAL).

Assessment of cognitive functioning

The McCarthy Scale of Children's Abilities was administered to each child. The scale had been translated into Yoruba, and if the child was more fluent in Yoruba than in English, it was administered in Yoruba. All urban and rural poor were tested in the presence of their mothers, and were given a small snack prior to testing both in the rural Health Centre and the Institute of Child Health. The children from the higher socio-economic background were tested at school or in their homes.

Table 2 presents the mean scores obtained on the GCI by age group, the standard deviations and the F values for the analyses of variance. The WN 5 and 6 yr olds scored higher than their younger peers, though not from one another. The RN 4 yr olds were lower than their peers, while the MAL 4 and 5 yr olds were poorer than the 3 yr olds.

TABLE 2. MEANS, STANDARD DEVIATIONS AND F VALUES OF GCI SCORES FOR 118 SUBJECTS BY AGE AND NOURISHMENT LEVEL

	2 & 3 yr	4 yr	5 yr	6 yr	
"Well-Nourished"	$n = 12$	$n = 11$	$n = 13$	$n = 9$	
GCI	105.42	101.09	111.38	120.22	19.36*
SD	10.39	11.24	17.20	19.74	
"Reasonably Nourished"	$n = 11$	$n = 8$	$n = 9$		
GCI	95.50	81.85	93.72		5.41†
SD	2.44	8.66	12.08		
"Poorly Nourished"	$n = 16$	$n = 21$	$n = 18$		
GCI	91.58	74.76	75.92		6.86†
SD	15.49	15.77	6.63		

* $P < 0.01$. † $P < 0.05$.

RESULTS AND DISCUSSION

All comparisons of the GCI and each of the sub-scales showed significant differences between the three groups. The mean scores obtained, the standard deviations and the F values of the analyses of variance are presented in Table 3.

TABLE 3. MEAN SCORES, STANDARD DEVIATIONS AND F VALUES FOR 118 WELL-NOURISHED, REASONABLY NOURISHED AND MALNOURISHED CHILDREN ON THE GCI AND SUB-SCALES OF THE MCCARTHY SCALE OF CHILDREN'S ABILITIES

Scale	Well-Nourished		Reasonably Nourished		Malnourished		F-Ratio (2, 115)
	M	SD	M	SD	M	SD	
G.C.I.	109	16.1	91.4	11.2	79.6	14.6	45.7*
Verbal	52.8	8.3	46.9	8.5	40.3	8.0	25.2*
Perceptual	55.1	11.0	42.0	6.9	36.4	8.0	48.9*
Quantitative	54.9	9.8	43.3	8.3	38.1	9.3	37.2*
Memory	56.6	9.0	46.6	6.2	42.7	7.3	36.3*
Motor	61.1	9.6	48.1	8.9	41.3	9.0	51.7*

* $P < 0.01$.

To clarify further the specific variables which might differentiate the groups, scores obtained on the sub-tests were analysed. To compare groups, irrespective of age differences, the individual scores on each sub-test were expressed in terms of deviations from the mean of the American standardization sample for each age group. The results of the analyses are shown in Table 4. (No analysis was carried out for the R-L orientation sub-test as the numbers were too small for the RN group.) The significant differences obtained on each scale between the RN and the MAL children, despite their similar environment, would indicate that nutritive levels do affect the performance of children. The differences obtained are almost identical to the decrements in performance of lower income group children, relative to higher income group children reported by Monckeberg *et al.* (1972). Sub-test analysis is of interest to evaluate the extent to which experience is the variable involved in these differences and the clinical significance of those sub-tests which do not necessarily reflect experimental variables.

Well-nourished and reasonably nourished performance differences

When one observed the scarcity of opportunity that children in the lower socio-economic groups have for object-manipulation and play, it is evident that some sub-tests of the McCarthy Scale rely to a certain extent on experience. The low performance of the RN group on sub-tests such as Puzzle-solving and Draw-a-Design, Draw-a-Person, relative to the WN group, could reflect this lack of experience. These tests were administered to reveal the extent to which lack of opportunity may effect skills which are generally considered desirable to scholastic achievement.

However, on some sub-tests there were differences between the WN and the RN in which it is not likely that experience was a critical variable, i.e. Tapping Sequence, Verbal Memory I, Numerical Memory I and II, Leg and Arm Co-ordination. Interestingly, the differences obtained by the RNs on some of these sub-tests did not deviate considerably from the American standardization sample; it is only relative to the WN group that these differences take on significance. While it is possible that the observed sub-optimal performance of the RN group on sub-tests as Tapping, Memory, Counting and Sorting, Leg and Arm Co-ordination, reflect a lesser ability to attend, concentrate and reproduce, it may merely reflect the greater opportunities that the WN children have been afforded. (The 5 and 6 yr olds of the WN group did score significantly higher than the 3 and 4 yr olds of the same group.)

Reasonably nourished and malnourished performance differences

Considering that these children come from the same environment the differences that occur on the sub-tests are highly likely to be a function of the poor nourishment of the MAL group. These children performed more poorly than their counterparts on tests of abstract reasoning, logical and relational thinking (i.e. Conceptual Grouping, Counting and Sorting; Word Knowledge) and on tests requiring perceptuo-performance accuracy (i.e. Tapping Sequence, Draw-a-Child, Leg and Arm Co-ordination and Memory). They were also less verbally fluent, that is, less able to classify and think categorically. When comparisons were made with WN

TABLE 4. MEAN DEVIATION SCORES, STANDARD DEVIATIONS, AND F VALUES FOR WELL-NOURISHED, REASONABLY AND MALNOURISHED CHILDREN ON SUB-TESTS OF THE MCCARTHY SCALE OF CHILDREN'S ABILITIES

Test*	Well-Nourished (n = 45)		Reasonably Nourished (n = 28)		Malnourished (n = 45)		F-ratio (2, 115)
	M	SD	M	SD	M	SD	
Block Building	0.13	0.90	-0.22	1.81	-1.57	2.23	11.5*
Puzzle Solving	*WvR						
Pictorial Memory	0.27	5.10	-3.15	2.57	-4.17	2.32	17.2*
	0.40	1.47	0.54	1.37	-0.50	1.51	5.8*
Word Knowledge			†RvM				
Number Questions	-0.07	2.40	1.02	3.89	-3.95	4.90	11.7*
	0.17	1.45	-0.91	1.46	-1.19	1.23	11.7*
Tapping Sequence	*WvR		†RvM				
	0.22	1.59	-0.98	0.79	-1.66	1.16	24.4*
Verbal Memory I	*WvR		†RvM				
Verbal Memory II	3.66	5.38	-1.30	4.64	-2.77	4.54	20.3*
	-0.04	2.96	0.03	1.68	-0.35	2.00	0.3
Leg Co-ordination	†WvR		*RvM				
	2.02	1.53	0.43	2.11	-0.88	1.74	29.8*
Arm Co-ordination	*WvM	†WvR	†RvM				
Imitative Action	2.14	3.17	3.34	2.90	-0.21	0.83	19.6*
	-0.01	0.67	0.47	0.44	-0.21	0.83	8.4*
Draw-a-Design	*WvR						
	3.18	3.22	-2.00	1.82	-1.68	1.71	57.6*
Draw-a-Child			RvM				
	1.28	3.21	-3.58	3.57	-5.30	3.43	43.7*
Numerical Memory I	*WvR						
Numerical Memory II	3.16	1.59	-0.88	1.15	-1.11	1.17	31.7*
	0.07	1.60	-0.57	0.51	-0.28	0.78	2.9
Verbal Fluency	*WvR		RvM				
	3.50	5.45	-0.14	4.26	-2.36	4.05	17.5*
Counting and Sorting	*WvM		*RvM				
Opposite Analogies	-0.05	2.23	0.06	2.27	-2.29	2.64	12.3*
	-1.00	1.78	-1.18	1.91	-1.80	1.36	2.6
Conceptual Grouping			†RvM				
	-0.38	2.68	0.53	2.29	-1.42	2.01	6.0*

*Significance levels between groups found to differ on the Duncan's Multiple Range Test for various tests are shown throughout table.

*P 0.01. †P 0.05.

group these children scored lower on 15 of the 19 sub-tests. Most of these differences were highly significant.

Such impaired functioning on most sub-tests by the MAL group, relative both to their counterparts and to the normal control, could suggest central nervous system pathology. It should be noted that the MAL group were differentiated from the WN group on 9 of the 12 sub-tests of the McCarthy Scale reported by Kaufman (1972) to differentiate from a control group children suffering from minimal brain damage, and from the RN by 4 of these sub-tests. It was noted in subsequent play-group activities, carried out following this testing, that the children of the MAL

groups showed marked awkwardness and rigidity in motor activities. This was in sharp contrast to the liteness displayed by the WN group.

Well-nourished group

The results obtained in the present study of the well-nourished and stimulated children do not support findings by other investigators (Yule *et al.*, 1975; Jensen, 1973; Kaufman, 1973; Shuey, 1966) of the generally lower performance of American and English black children, in contrast to the indigenous white populations, on tests purporting to measure intelligence. The WN children in this sample differed considerably, of course, from the black children studied in Western countries, in that they have not been part of a discriminated-against minority group, frequently impoverished. While the WN group in the present study may not have had all of the educational advantage from birth onward of white children from similar backgrounds, they have not had to face possible social rejection from the community.

The results obtained in this group are consistent with findings reported by other investigators on higher socio-economic Yoruba children, using a slightly adopted Yoruba version of the Stanford-Binet test (Lloyd, 1971; Janes, 1975, citing Durojaiye).

On several tests it was noted that the WN children deviated markedly from the American standardization sample. On memory tests these children scored higher than American children; a finding also obtained with American black children (Jensen, 1969). The WN children also performed considerably above the mean on the Draw-a-Design and Verbal Fluency sub-tests.

Contrary to other investigations (Jensen, 1969) the children in the WN group deviated very little from the American mean on other sub-tests, some of which involved abstract abilities. The question arises as to why these children did not perform equally on all tests relative to their own performance. One possibility may be that the traditional authoritarian structure of both the home and school, which still prevails in some well-to-do households, does not provide the child with the appropriate experiences to develop all abilities equally. Children are frequently not permitted to enter into discussion with elders (even those who are only a few years senior to them), nor are questions always encouraged. Another possibility is that there is little opportunity for child-educational play of the type that develops problem-solving and reasoning skills, children frequently being left in the care of illiterate housemaids.

It is of interest to note that a portion of the WN group who had not been exposed to an unduly authoritarian environment, and had had ample opportunity for educational play from 2 onwards performed in a fairly even manner on most sub-scales. These were the adopted children who were, in all cases, adopted into the homes of professionals. Despite the fact that some of these children had experienced extreme privation in their infancy, over periods ranging from a few weeks to 23 months, the mean scores obtained by this small group on the sub-scales of the McCarthy were 52, 52.4, 49.3, 49 and 52 on the Verbal, Perceptual Performance, Quantitative, Memory and Motor Scales, respectively. On the Conceptual Grouping and Opposite Analogies sub-tests, both tests of abstract ability, they obtained mean-deviation scores of 0.92 and 0.90, respectively, above the American stan-

dardization sample. There would be no reason to believe that these children have any greater genetic potential for abstract reasoning than the remainder of the WN group who, relative to their memory scores, scored only in the average range. In fact, the Memory Scale of this adopted group appears to be a fairly accurate, even if somewhat low, predictor of their overall performance.

In summary, there appears to be little doubt that the impoverished environment of the children in this study has been responsible for their sub-optimal performance, in contrast to that of their better-off peers. The children who were most malnourished, as judged by their physical growth status, performed most poorly on cognitive measures. There seems little doubt that poor nutrition is a most important variable affecting cognitive development, although at this time it is impossible to assess its precise contribution. While it might be possible to plan a definitive study on the effect of cognitive stimulation across groups of all nutritive levels, we feel that, at this time, priorities for allocation of monies and personnel should involve systematic investigation of intervention to improve the total environment, i.e. nutrition, sanitation, cognitive stimulation, etc.

SUMMARY

The McCarthy Scale of Abilities was administered to 118 Nigerian children between the ages of 2½ and 6 yr who came from "well-to-do" urban and "poor" urban and rural environments. The "poor" groups were sub-divided into the "Reasonably Nourished" and the "Malnourished" on the basis of their physical growth status. The "well-to-do" group served as the "Well-Nourished" control.

The "Well-Nourished" group scored significantly higher than the "Reasonably Nourished", the latter significantly higher than the "Malnourished", on the G.C.I. and all sub-scales. It was felt that future remedial measures should try to improve hygiene, sanitation and cognitive stimulation as well as nutrition in "poor" groups.

Acknowledgements—Thanks are due to Miss I. Soyemi, Mrs. A. Adeyemi and Miss Y. Adedayo for administration of the cognitive tests, and to Mrs. I. Anubi, Mrs. L. Okudu and Mrs. C. Kayode for their assistance in collecting the data on physical growth of the children. Also to staff and students at All Saints' School for their co-operation. We should also like to thank Dr. O. Longe, Director, and Mrs. K. Olaofe, Programmer, of the Computing Centre, University of Ibadan, for their help in analysing the data as well as Mr. Alex Ebel, Department of Management Services, Division of Organization and Methods, City of Toronto, City Hall, Toronto.

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The East End of London, a celebrated working class area, is in the process of considerable change. Willmott and Young (1957) have described the decrease in population by the migration of nuclear families to the new satellite towns and estates of London since the war. The resultant breakdown of traditional kinship ties produced stressful changes in family patterns. Predictably, these stresses are paralleled by lower birth rates and higher illegitimacy and infant mortality rates in relation to the national average (Watton, 1972). In addition to the demographic data about the area, there is a complementary literature about the community ethos. Searle (1972) has suggested that "There is a basic hostility to authority in most people living in the East End. The children and their parents know where the power lies . . . the children know particularly, because they are right on the end of it." The characteristics of this population should only serve to aggravate the problems for professionals examined in this study, since family intervention and other psychiatric approaches tend to be designed for a middle class clientele. The families in this study had been referred to the London Hospital Child Psychiatry Clinic, part of a teaching hospital department of psychiatry, closely linked to the paediatric department. It is one of six child guidance clinics serving the borough, but as a teaching hospital clinic it also accepts referrals from outside the area.

METHOD

The sample

Twenty-five families were selected from the clinic's new referrals, and interviewed at the rate of two per week. Eligible referrals were defined by the following criteria: (1) no clinic contact in the past 6 months, (2) domicile in a specified area about the hospital (predefined on the basis of accessibility for home or clinic visit). Random numbers could not be used for sample selection because the clinic did not keep a long waiting list, and the flow of new referrals was unpredictable (varying from two to six per week). New patients were normally allocated to clinic staff at a weekly meeting and appointments then mailed. A research appointment letter was included with the clinic appointment for the first two new referrals considered at the meeting who fulfilled the criteria. There was no known alphabetical, or other, bias involved in this procedure. Two-thirds of referrals meeting the criteria during the period of the survey were included in the sample. Only one selected patient was excluded: a paranoid mother known to the social worker, in whom interview might have produced complications for future treatment.

The interview

The research appointment letter requested the presence of both parents at home in the evening, to participate in a survey of parental ideas about the child psychiatry service. They were interviewed prior to clinic assessment to ascertain their attitude unbiassed by their experience of a particular assessment by a particular psychiatrist. The interviews were conducted at home in the evening to facilitate the father's presence.

The interview schedule was constructed from the hypotheses described; a proforma is appended. A pilot study of six interviews produced some rearrangement but no substantial change. A semi-structured interview seemed most appropriate to this complex subject (Moser, 1971). Interviewer bias was consistent to the extent that the author conducted all interviews. The schedule produced three types of data: (1) demography, (2) questions producing positive/negative answers (e.g. Q. 17), (3) open questions, which could be partially quantified by counting the number of responses (e.g. Q. 15).

At the parents' home the researcher explained the purpose of the research, to understand their needs more fully and improve our service. The identities of the interviewer and the psychiatrist they would see at the clinic were clarified. The author explained the form of the interview and the need

for answers from both father and mother. It was emphasized that the child or family problems were to be dealt with later at the clinic assessment. Queries raised by the interview would be discussed after administration of the schedule. The presence or absence of children was left to the parents. The whole visit averaged 45 minutes.

Participation in the research and clinic assessment provided hard data for comparison with expressed attitudes. Diagnosis provided by assessing psychiatrists proved unfit for study: in the comparison group a wide variety of theoretical models was used; the classification of the index group failed to distinguish between neurotic and anti-social children due to a tendency to label anti-social behaviour as "neurotic" on the basis of psychodynamic formulations. No children in either group were considered psychotic.

RESULTS

All index mothers and all but one father participated in the research interview though a few fathers were late. The missing father had not been informed of the occasion by his wife. This provides some behavioural data consistent with the first three hypotheses. Parents seemed to relax and enjoy the interview once explanations were given. Children played about the room and cups of tea were routinely provided. The interview frequently led to queries about the families' role in the child's disturbance and the need for the fathers' participation. Fathers were told they would be welcome at the assessment, but that this was not currently a clinic policy or condition. Parents often attempted to initiate assessment and therapy but the interviewer persuaded them to await the clinic visit for exploration of their problems. In fact the interview schedule seemed an excellent tool for arousing interest in family therapy.

TABLE 1. CHARACTERISTICS OF INDEX AND CONTROL FAMILIES

	Index				Comparison
	25				50
Total no. of families	II.	III.	IV.	V.	Not known
Social class	3	13	6	3	
Referral source					
G.P.	15	(60%)			25 (50%)
Paed.	5	(20%)			14 (28%)
School	2	(8%)			6 (12%)
Court	1	(4%)			2 (4%)
Other	2				3
Immigrants	6	(24%)			8 (16%)
Divorced mothers	2	(8%)			4 (8%)
Step-parents	1				2
	Step-mother (4%)				Step-fathers (4%)
Child's sex	7F	(28%)			18F (36%)
	18M	(72%)			32M (64%)
Child attended Clinic appointment	23	(92%)			37 (74%)
Fa. attended clinic appt.*	10/23	(43.5%)			3/46 (6.5%)

*Chi Square (11.385) 1 df, $P < 0.001$.

Table 1 shows the index and comparison groups to be comparable in terms of source of referral, sex distribution, and rates of immigration and divorce. The research visit produced improvement in subsequent clinic attendance particularly by fathers. It is noteworthy that index family attendance conformed exactly with the intentions stated at interview (Q. 10), whether or not they favoured family assessment. This provides further behavioural data to support the predictive value of the attitudinal findings.

TABLE 2. THE RELATIONSHIP BETWEEN PREPAREDNESS FOR FAMILY ASSESSMENT AND OTHER VARIABLES

	Positive group (prepared to be seen as a family)	Negative group (unprepared to be seen as a family)
Total no. (both parents agree)	20	5
Social class II	3	—
III	11	2
IV	5	1
V	1	2
Referral—Self	2	0
Self & G.P.	11	1
G.P.	1	2
Paed.	3	2
Police	1	0
School	2	0
Mean		
No. of reasons in favour of family assessment per family*	2.75	0.8
Mean		
No. of reasons against family assessment per family*	0.7	1.8
Child attended clinic appt.†	20	3
Father attended clinic appt.	10/19	0/4

*Chi square (12.28) 1 df $P < 0.001$.

†Fisher's test $P < 0.05$.

Table 2 provides most of the data relevant to the first hypothesis. Eighty per cent of fathers and all but one mother were prepared to participate in family assessment. Their actual performance is consistent with their attitudes: all the mothers and half the fathers of the positive group attended the clinic versus only 60% of the fathers of the negative group. This underlines the fact that it was the fathers who were most reluctant to participate, contrary to the wish of their wives. Both attitude and performance are consistent with the number of reasons offered in favour (Q. 15) and against (Q. 16) family attendance suggesting cognitive support for their attitudes. There is a tendency for positive parents to be of higher social class, to less often have anti-social children and to initiate referral themselves, though numbers are insufficient for statistical analysis. This table clarifies the origin of referrals. Twelve of the 15 parents referred by general practitioners had gone to

the family doctor purely to obtain a formal letter to the child psychiatrist. Furthermore, mothers managed the referral process in over 75% of families (Q. 8).

Fifty-five per cent of positive parents said (in answer to Q. 18) they would spontaneously exclude siblings from family interviews (to protect them), unless specifically requested to bring them. Eighty per cent of negative families would spontaneously include the whole family. Thus their concept of relevant family does not account for parents' attitudes to family assessment.

TABLE 3. ATTITUDE TO HOME VISITS AND OUT-OF-HOURS APPOINTMENTS

Sample size	25
Prefer home visit	92%
Dislike home visit	8%
No. for whom home visit essential	32%
for family assessment	24%
No. for whom out-of-hours essential	

Table 3 provides data relevant to the second and third hypothesis. Over 90% of fathers and mothers prefer home visits though only one third regard it as an essential requirement for seeing the whole family. The preference for home visit related to feelings such as "we feel relaxed and can really talk at home" and "you can see us as we really are". Convenience was not the issue and in fact the two families who disliked home visits were negative to family assessment in any setting. Evening appointments were required by one quarter of parents for family assessment and most of these would also require home visiting.

TABLE 4. EFFECT OF PREVIOUS CONTACTS ON ATTITUDES TO FAMILY ASSESSMENT

	Positive group (<i>N</i> = 20)	Negative group (<i>N</i> = 5)	Totals	Unsatisfactory experience in past
Previous psychiatric contact:				
Initiated for Father	1	0	1	—
Mother	2	2	4	2
Child	9	1	10	3
Previous social work contact	13	2	15	5

Table 4 shows a surprisingly high number of prior contacts with psychiatrists and social workers. Previous experience with psychiatry did not seem a major variable in determining interest in family assessment unless it was grossly unsatisfactory. This applied to two mothers who had, themselves, undergone compulsory adult psychiatric assessment without treatment or follow-up. They remained hostile to any form of psychiatric contact for their children or themselves and accounted for the only two children of the index group who failed to attend the clinic.

In Table 5 parents' explanations to the index child about the child psychiatry appointment are classified into three groups. "Explanation" means that the parents gave specific information beyond telling the child of a visit to "a doctor". Sixty-

TABLE 5. INFORMATION GIVEN TO THE CHILD ABOUT THE PSYCHIATRIC APPOINTMENT

"No information"	"To see Dr."	"Explanation"
2	14	9

four per cent of the children had been given no concept of the nature of a psychiatric assessment. Parents offered two main reasons for this failure: either they did not know enough about what psychiatrists did, or, they were afraid the child would embarrass them by telling the neighbours. This latter fear is consistent with the finding that while parents discuss child management with friends they keep secret visits to psychiatrists (Q. 13). This indicates the stigma surrounding contact with psychiatrists. Interestingly, parents tended to address the interviewer as "Mister" in their homes.

DISCUSSION

Questions of accuracy and replicability arise in studies of attitudes and need to be *dealt with before the implications of the results* are examined. Two tests of the degree to which parents' actual behaviour conformed with their attitudes are inherent in the design of the study. First, the research interview involved both parents seeing a psychiatrist at home in the evening. Participation in itself served as partial behavioural test of hypotheses being examined. Second, subsequent clinic attendance conformed precisely with that predicted in the interview. That parents did what they predicted in these respects, suggests that their other predictions might hold true.

The first hypothesis, that parents will accept family assessment is supported by three findings. Eighty per cent of sample parents said they would be seen as a family, and provided a significant number of reasons in favour of their attitude (Table 2). Third, their behaviour was consistent with these attitudes: all parents except one father participated in the research interview and their subsequent clinic attendance improved significantly over the comparison group (Table 1). We are left to examine why the research interview produced these effects. There are three possibilities: the researcher himself, the content, or the fact that there was a research interview with both parents in the setting of their own home in the evening. The setting is considered specifically later.

The researcher was an experienced therapist and his Australian accent freed him of some class barriers. This does not explain the presence of the parents from the outset of the research interview. Nor is it likely to account for the improved clinic attendance since most patients were told they would be seeing another psychiatrist at the clinic. Furthermore, a semistructured 30 minute interview limits the exhibition of the key therapeutic skills described by Traux and Carkhuff (1967). Similarly, the content of the interview seems insufficient to explain the findings, particularly in that the interviewer avoided discussion of the child's problems.

The research interview itself seems the major factor producing this degree of parental cooperation. It may have overcome some of the obstacles to client participation described by Mayer and Timms (1970). They argue that clients and workers often differ in judgement and perceptions: clients may perceive workers as

"not interested" or "failing to understand them". Mayer and Timms (1970) propose that "working class clients are not introspectively inclined and expect the worker to play an active part in solving their problem". The interview schedule demonstrated interest and the home visit activity. This congruence provides one explanation of the effects of this study.

The second hypothesis that home visits are required for family contact is only partially supported. Only one third of parents regarded home visits as an essential condition of family assessment (Table 3). In subsequent clinic practice, the majority of fathers have attended in response to specific invitation. This suggests that the major obstacle to fathers' attendance is simply that, in this community, attendance at children's doctors is seen as part of the maternal nurturing role. Explicit invitations will often counteract this. However, 92% of parents said they preferred home visits and virtually all cooperated with the research in that setting (Table 3). These findings are consistent with the researcher's subjective impression that families were more relaxed in their homes. Barnes (1973) and Friedman (1965) describe similar advantages of more contact with fathers and lower attrition rates. The preference might arise out of diminished fear of the stigma of psychiatric contact. A further explanation might be derived from Bowlby (1973). His thesis, that fears of strangers and strange environments are natural phenomena which normally resolve but which "neurotics" retain, could explain the preference for the familiar in the often neurotic parents of disturbed children.

The third hypothesis is less well supported. Only 24% of families regarded out of hours appointments as an essential requirement for family assessment. Most of these parents required home visiting as well (Table 3). It may be noted that this percentage matches the proportion of the comparison group who failed to keep their initial clinic appointment (Table 1). In contrast, all index families were seen at home out of hours and 92% at the subsequent clinic assessment.

These findings suggest that most of those families who fail to attend clinic appointments will participate in home contact, after hours. Alternative approaches to this problem are relatively cumbersome. Jacobs' (1972) plan of education of parents prior to seeing the psychiatrist still requires them to attend the clinic in the first place. Cartwright (1972) in his study of services for maladjusted children also demonstrated the need to fit clinics to parents' definition of acceptable service. He suggested child psychiatry "change its guise to counselling" and "work in an educational setting". Home visits to those who fail to attend a clinic may provide a simple alternative.

The fourth hypothesis cannot be properly explored since the small number rejecting family assessment precludes statistical analysis (Table 2). However, the table does suggest that general practitioners had not performed a diagnostic role for index families. Rather they simply wrote formal referrals at the parents' request. This practice may be questioned though the study does not indicate whether family doctors perform a filter function and treat a proportion of those requesting child psychiatry assessment themselves.

The high frequency of previous contacts with psychiatric workers (Table 4) shows that this sample was not a selected healthy middle-class group. The number of

mothers who had had previous treatment is similar to Wolff's (1968) Edinburgh sample. This suggests the findings may be relevant to similar working class communities. Previous experience with psychiatric workers had not informed parents of two important issues. The failure of the majority of parents to explain to their children the nature and purpose of the visit to the child psychiatrist augurs ill for the child's capacity to participate fully in the assessment (Table 5). Furthermore, just as fathers need specific invitations, so do siblings, or half the families will exclude them. Clinics might consider education of referring agents and phone contact with referred families as relevant strategies to deal with these recurring problems.

Professionals often perceive incompatibilities between their sophisticated models and their patients' expectations and capacities. The problem may inhere not in the complexity of the theory, but in a failure to appreciate in detail, the perceptions and attitudes of parents. Procedures may be developed without extensive public education or resiting of clinics. The attitudinal and behavioural data in this study suggest that the majority of parents will cooperate in family assessment if specifically invited. Most of those who fail to attend a clinic may cooperate in their home setting, out of working hours.

SUMMARY

Although family assessment is widely regarded as an important aspect of child psychiatry practice, psychiatrists often doubt parents' readiness to participate. The attitudinal and behavioural data in this study suggest that the majority of parents will participate in family assessment if specifically invited. Most of those who fail to attend a clinic may cooperate in their home setting, out of working hours.

Acknowledgements—I wish to thank Professor D. A. POND for his continuing support and enthusiasm. The help and tolerance of my colleagues and their patients at the London Hospital, Department of Child Psychiatry was essential and invaluable.

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APPENDIX

Parent Attitude Schedule

(Answers obtained from both father and mother in each other's presence)

- 1-4. Name, Address, Age, Occupation.
5. Who lives here?
6. Children—No., Age, Adoption?
7. Who first had the idea of your coming to the clinic?
Fa/Mo/G.P./School/Police/Other.
8. Who got the referral note from the G.P.?
Did not get one.
Yes. Fa/Mo/Other.
9. What did you think and feel when Dr. referred you to Child Psychiatry?
10. Who is to come to the Clinic appointment?
11. Have you had any help from other psychiatric clinics?
12. Have you seen Social Workers?
13. Has anyone you know well had help with their children?
14. If we asked you to be seen as a *Family* what would you think/feel about it?
15. What advantages can you see in coming as a family?
16. What difficulties can you see in coming as a family?
17. Would you be prepared to be seen as a family?
18. Who would you have in a family interview?
Fa/Mo/Index Child/Other Sibs/Others.
19. How do you feel about clinic people coming to see your family at home?
20. Would they *have* to come to your home for a family interview?
21. How do you feel about clinics seeing families outside 9-5, the usual working hours?
22. Would they *have* to do this to see your family?
23. What sort of help would you like from the clinic?
24. What sort of help do you think the clinic will in fact give you?
25. What have you told your child about the appointment at the clinic?
Nothing/to see a Dr./Explanation.

THE INTERCORRELATION OF MEASURES OF SEX-ROLE IDENTITY

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STUDIES of preschool children's sex-role identity are plagued with the problem of choosing appropriate measures. It is particularly difficult to satisfy requirements for validity. For example, several researchers have intercorrelated performance on a measure of preference (asking a child to indicate or name the toys and friends s/he would most like to play with) and a measure of adoption of sex-roles (actual behavior). Their results have shown that no relationship exists between the two types of instruments, or, that a relationship exists for some subgroup of the sample (defined by age, sex, or social class), but not for all subgroups (Biller, 1969; Borstelmann, 1961; Fling and Manosevitz, 1972; Sears *et al.*, 1965; Thompson and McCandless, 1970; Ward, 1968). The present study examines the degree to which children's performance on any of seven widely used measures of sex-role identity correlates with their performance on any other measure.

METHOD

Subjects

One hundred and twenty-two children from two small cities served as subjects for this study; 60 children (39 male, 21 female) were from Middletown, CT, and 62 children (36 male, 26 female) were from Avignon, France. The age range for the American sample was 3 years 0 months (3.0-4.8), and for the French sample 2.6-5.6. In each city the majority of the children were Caucasian (three American children were from minority groups, and three French children), and the area in which they lived was predominantly middle class.

Measures

Toy Preference Test. In each of seven trials the second author presented each child with three pictures of toys, one masculine, one feminine, one neuter, and asked the child to point to the one s/he liked best. All children saw the same pairings of toys in the same order of presentation. The toys were selected by a procedure similar to that first used by Fauls and Smith (1956), that is, 17 adults (nine women and eight men) from each city were asked to rate 30 pictures of toys pasted on 3 × 5 cards. The seven toys most frequently judged masculine, feminine and neuter were selected for the test. Over 90% of the adults agreed on each categorization.

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Accepted manuscript received May 1977

Child's Peer Preference. After each subject completed the Toy Preference Test, s/he was asked to "Name the three children that you like to play with the most". This question was successfully used by Kohlberg and Zigler (1967).

School Toy Choice. The second author recorded the toys with which each child played for three 45-min free play periods in the nursery school day. Following all observations within a culture the observer listed all toys played with and asked a group of 20 adults (10 male, 10 female) to rate the toys as stereotypically masculine, feminine, or neuter. Those judging were in similar occupations to the parents of the subjects (e.g. nurse, postman, teacher). Majority decisions were used to define the sex-appropriateness of the toys. This methodology parallels that of Clark (1969) and Pederson and Bell (1970).

Home Toy Choice. On a questionnaire parents were asked to list the seven toys that their child played with most frequently at home. These toys were rated as stereotypically masculine, feminine, or neuter by the same adults who rated the School Toy Choice items. Fling and Manosewitz (1972) also found it useful to assess the sex-typing of favorite toys at home.

Home Peer Choice. Parents were also asked to list the first names of the three children with whom their child played most often.

Play Behavior Total. Teachers were requested to rate each child's play behavior on seven dimensions of activity: play is vigorous and involves physical contact; child throws objects; enjoys physical activities; likes to play in groups or with other children; enjoys quiet games; while playing or working, likes to sing or talk to self; is affectionate (warm). A five-point rating scale was used, ranging from (1) never demonstrates to (5) always demonstrates this behavior. These dimensions were drawn from Rosenberg and Sutton-Smith (1959) who defined the first three as masculine attributes, the last four as feminine.

Masculinity/Femininity Rating. Teachers were asked to rank order the members of their class from the most "masculine" child to the most "feminine" child. No definitions were provided for "masculine" or "feminine". Vroegh (1971) found this type of rating scale to be a useful index.

Scoring

Two scores were derived for the Toy Preference Test and the Home Toy Choice measure; intensity of same sex preferences or choices (number of same sex toy selections minus number of cross sex selections); and existence of cross sex preferences or choices (whether or not any cross sex selections were made). Similar scores were derived from the School Toy Choice, Child's Peer Preference, and Home Peer Choice measures, but the intensity scores were expressed as a proportion, that is, as number of same sex materials or friends minus number of cross sex materials or friends divided by the total number of toys or friends preferred or actually chosen.

Ratings of Play Behavior and Masculinity/Femininity were standardized within each class. The Play Behavior Total was converted to a z score, while the Masculinity/Femininity Rating was standardized separately for males and females within a class. For females, the mean rank was defined as number of children in the class minus number of females, and each individual score was derived by subtracting the mean rank from the individual's rank, and dividing by the number of females. For males, the mean rank was defined as the number of males in the class plus one, and each score was derived by subtracting an individual's rank from the mean rank, and then dividing by the number of males. Thus, children's Masculinity/Femininity scores ranged from -1 to +1 where a negative score implied a cross sex rating, a positive score, an appropriately sex-typed rating.

RESULTS

When one examines the intercorrelations of the seven measures (Table 1), it is evident that preschool children do not behave in a consistently sex-typed manner on these tests. In the upper half of Table 1 are the correlations of the intensity scores; four of 21 are significant. The ten correlations of existence scores are displayed on the lower half of Table 1. Here three of 10 are significant. Even when a correlation is significant, its absolute size is small and therefore little variance is accounted for.

TABLE 1. INTERCORRELATIONS OF SEX-ROLE MEASURES†

	Toy Pref.	Child's Peer	School Toy	Home Toy	Home Peer	Play Beh.	Male Fem.
	Test	Pref.	Choice	Choice	Choice	Total	Rating
Toy Preference Test	--	.09	.12	.27**	.20*	.04	.14**
Child's Peer Preference	.08	--	.09	.10	.20	.04	.13
School Toy Choice	.13***	.04	--	.10	.09	.07	.09
Home Toy Choice	.19	.14	.24*	--	.01	.06	.14
Home Peer Choice	.17	.13	.24*	.12	--	.07	.10
Play Behavior Total	--	--	--	--	--	--	.21**
Masculinity-Femininity Rating	--	--	--	--	--	--	--

† Intercorrelations of intensity scores appear in the upper half of the matrix; intercorrelations of existence scores appear in the lower half.

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.

Second, the correlations do not cluster. For example, on the upper half of Table 1 the Toy Preference Test correlates significantly with both the Home Toy Choice ($r = 0.27$, $P < 0.01$) and the Home Peer Choice ($r = 0.20$, $P < 0.05$), but these latter two measures are uncorrelated ($r = 0.01$). This is the case for all similar three-measure groupings. In addition, the significant correlations of intensity scores are not supported by significant correlations of existence scores. Though the Toy Preference Test and the Home Toy Choice are strongly correlated in the upper half of Table 1, they are not significantly related in the lower half ($r = 0.19$). And this is the case for each of the significant correlations.

Further evidence is provided by the results of a factor analysis of the intensity and existence scores on these seven measures. Each of the five factors produced by the varimax rotation contains the scores of only one instrument (Table 2). Thus, Factor 1 may be called Child's Peer Preference, Factor 2, Home Peer Choice, Factor 3, Toy Preference Test, Factor 4, School Toy Choice, and Factor 5, Home Toy Choice. The teacher ratings do not load above the criterion of 0.5 on any of the factors.

To examine the possibility of age, sex, or culture differences in the consistency of behavior across measures, correlation matrices similar to Table 1 were constructed for each subset of the sample, that is, for 3-year-old American females and 3-year-old American males, for 4-year-old American females and 4-year-old American males, and for the four groups of French children. An average correlation was then computed for each group to serve as a consistency score of the children's performance. The results are as follows: 3-year-old French females, $r = 0.01$; 3-year-old French males, $r = 0.15$; 3-year-old American females, $r = 0.11$; 3-year-old American males, $r = 0.15$; 4-year-old French females, $r = 0.22$; 4-year-old French males, $r = 0.19$; 4-year-old American females, $r = 0.22$; 4-year-old American males, $r = 0.17$. The average r is somewhat higher for the 4-year-olds, but a statistical comparison of even the largest and smallest r is not significant.

TABLE 2. FACTOR ANALYSIS OF SEX-ROLE MEASURES

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
	Child Peer	Home Peer	Toy Pref.	School Toy	Home Toy
Toy Pref. Test--Intensity	-.12568	.15312	<u>.72207</u>	.18085	.20798
Toy Pref. Test--Existence	-.08905	.12703	<u>.71053</u>	.20659	.10266
Child's Peer Pref.--Intensity	<u>.84723</u>	.05707	.09539	.10565	.02709
Child's Peer Pref.--Existence	<u>.91508</u>	.14816	-.05673	.02327	-.03925
School Toy Choice--Intensity	.07922	-.00353	.08734	.31636	.08499
School Choice--Existence	.00399	.23246	.08718	<u>.86822</u>	.01758
Home Toy Choice--Intensity	.10469	-.01537	.20045	-.03663	<u>.70240</u>
Home Toy Choice--Existence	-.13598	.08552	.01273	.25082	<u>.71573</u>
Home Peer Choice--Intensity	.12841	<u>.78080</u>	.10131	.19615	-.00930
Home Peer Choice--Existence	.09362	<u>.94192</u>	.08088	.02347	.07548
Play Behavior Total	.02639	-.11602	.17821	-.12464	-.02715
Masculinity/Femininity Rating	.11854	.02966	.40308	.00632	.03584

At this point it might be useful to comment that trends and scattered significant results generally support the literature with regard to sex, age and cultural differences (Maccoby and Jacklin, 1974). In particular, where differences were found, boys showed a more intense same sex identity, as did 4-year-olds and French children.

DISCUSSION

From these results one may conclude that preschool children do not demonstrate a consistent pattern of sex-typed behavior on commonly used measures of such behavior. It should be noted, however, that within each measure, children's behavior is stable. That is, they do play with the same set of friends from day to day, and with similar toys. Sex-typed behavior is not lacking; it simply does not remain consistent across measures.

Since measures of sex-typing do not correlate, a researcher must carefully choose measures appropriate to the specific purpose of the research. If it is behavior with which one is concerned, it is not reasonable to use a preference or more attitude-oriented measure as an indicator. In trying to determine what aspect of sex-typing should be of concern, it would be useful to have a commonly agreed upon criterion for validity for sex-role identification. It seems reasonable to define a behavioral measure such as School Toy Choice for this purpose, and then to consider all measures which are highly correlated with School Toy Choice as good measures of sex-typing. This latter decision, of course, is not an easy one to make since, for example, in Table 1 the School Toy Choice correlates with the Toy Preference Test when a measure of existence is used, but not when the intensity score is considered.

The problem of choice of measures is more acute when experimenters use only one measure to differentiate a sample into strongly sex-typed and weakly sex-typed children, and then proceed to assess these children on some dependent measure. The validity of the findings on the dependent measure may easily be questioned.

The lack of intercorrelation between measures will be even more significant if it persists with measures of sex-typed behavior in children older than five. Because the measures used with older children are quite different from those used with preschoolers and few researchers have examined intercorrelations, we have no exact knowledge of how stable sex-role behavior is in 6-10-year-olds. Many of the instruments used with older children are cognitively based (Nadelman, 1974; Williams *et al.*, 1975), and hence scores on them may cluster. However, if one compares children's performance on a cognitive measure with their behavior, one would not predict that a significant relationship would appear. After all, it is well known that attitude and behavior measures are usually uncorrelated in adult populations, and we have evidence that the same is true of preschoolers. Expecting quite different results with elementary school children seems unrealistic.

Whatever the results of further research in this area, it is clear that a firm definition of a strongly sex-typed child is necessary. At the moment researchers must limit themselves to reporting that a measure shows sex-typing on a specific aspect of a child's behavior, and refrain from generalizing to all aspects of sex-typed behavior.

SUMMARY

To examine the consistency of their sex-role identification, 122 preschool children were given seven measures which are frequently used to evaluate this dimension of personality. The degree of sex-typing of the children on any one measure was not strongly related to the degree of sex-typing demonstrated on any other measure. The implications of this finding for methodology in sex-role research are discussed.

Acknowledgements—This research was supported in part by a Wesleyan University Faculty Research Grant to the first author and a Wesleyan University Summer Study Grant to the second author. The cooperation of the Middletown Cooperative Nursery School and The Christ Lutheran Church Nursery School of Middletown, CT, and the Ecole Maternelle La Barbière of Avignon, France, are gratefully acknowledged.

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THE DEVELOPMENT OF SPEECH AND MENTAL PROCESSES IN A PAIR OF TWINS: A CASE STUDY

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INTRODUCTION

REPORTS of studies on children who have been socially isolated from a very early age and who had little or no contact with a linguistic community indicate that these children do not develop speech or are very severely retarded in language development (Clarke, 1972, 1976; David, 1947; Koluchova, 1972, 1976; Szuman, 1958). The suspicion of mental retardation or psychotic disorder as the reason for these children's abandonment or isolation has not been supported by the remarkable rate of behavioural, intellectual and linguistic progress once placed in an environment that stimulated language and other development.

This study attempts to replicate the results obtained in 1933-1935 (personal communication) by Luria and Yudovich (1959), in which 5-yr old boy twins who were severely retarded in their speech and play development were observed. The twins were separated in an attempt to prevent the twin communication which precluded their use of language and also to create an objective necessity for the development of speech. The more retarded of the boys was then given special speech training. Both separation and specific language training were found to be important in the remediation of the twins' language retardation. The main differences between the studies are that the twins in this investigation are girls who were living at home during the intervention period, while Luria's subjects were boys resident in a kindergarten for twins attached to a medical genetic institute. Also speech training was provided for both girls for ethical reasons. The twins in this study were visually identical, but had not been tested for zygosity.

CASE HISTORY

The twins were first born children. Twin B had a forceps delivery during which her arm emerged first and her shoulder was broken. No other special birth difficulties are noted. Both girls showed normal motor milestones. Twin A walked at 15 months

*Née Francis, under which name with Sutton, this study was briefly outlined in Clarke and Clarke (1976).

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Accepted manuscript received 4 June 1977

and Twin B at 18 months, but they were delayed in acquiring speech. There was no reason to suspect brain damage as a cause for their mental retardation, although this could only be ultimately proved by acceleration of their linguistic and intellectual skills under suitable environmental (training) circumstances. Luria states about his experimental twins (personal communication) "The children were intellectually normal which it was possible to deduce from their behaviour and their subsequent development".

Their mother had married at 19 but separated from her husband, an itinerant musician, after a year while 6 months pregnant with the twins who were born in February, 1969 and were cared for by friends for 3 months. Their mother had no contact with them during this period as she was working to support herself. They were moved to some distant relatives who intended to adopt them, but this couple's marriage dissolved and the twins were taken into care for a few weeks. A maternal uncle and aunt then looked after them for the remainder of their first year.

During the year, the mother had returned to her husband for 3 months, become pregnant and left again. She moved into a damp, mouse-infested council house, in 1970, which was scheduled for demolition, and lived there with the twins. She suffered from depression during this period and attended her G.P. for treatment. The family was rehoused in November 1971, although remaining in the slum area and mother remarried in 1973. She continued to be socially isolated and depressed, and her marriage did not alleviate her state due to marital conflicts and her husband's long working hours.

The twins were admitted to a day nursery at the age of 4 years in the same area of run-down terrace houses scheduled for demolition. All the children attending were from severely socially and culturally deprived families. The twins were referred for assessment aged 4 years 11 months as there was concern whether they would be able to cope with normal schooling. Their speech was unintelligible and their play underdeveloped. They had made no progress during their period in the nursery. The girls were almost indistinguishable in their verbal and cognitive abilities and in general personality, although Twin A tended to be more dominant. They played together continually and did not mix with other children, but were friendly and amenable to adults.

The psychological assessment on the Stanford-Binet Intelligence Scale (Terman and Merrill, 1961) indicated that both twins had a mental age of 3 yr 7 months (I.Q. 69). Individual scoring of test items was very similar for the two girls.

Intervention at this period resulted in the family being rehoused in an outer suburban area so that the twins could attend a two-form entry infant school under less stressful circumstances of marked social and cultural disadvantage. The purpose was to separate them at school so that they would be exposed to an environment that demanded speech from them individually. It was hypothesized that the twin situation had been instrumental in contributing to the speech delay, particularly in the stressful social conditions under which they had been living.

The parents were very co-operative during the course of the study. They allowed the psychologist to visit their home, and the mother readily bought a suggested bedtime story book. They also permitted a tape recording of all verbal interaction that occurred at home during one evening. During the study the mother's emotional

state greatly improved. Her depression lifted and she began to make friends with her neighbours. She liked the flat and the area, and even though the family continued to be under financial stress, due to father's unemployment, she made rapid improvement.

The infant school was made fully aware of the purpose of the study from the outset. The headmistress strongly supported the idea of remediation of early deprivation as she herself had successfully adopted a severely deprived child in the past and had therefore direct personal experience of the rapid acceleration of mental growth under an improved social environment. The staff were also experienced and competent.

INTERVENTION PROCEDURE

The study was carried out during the 1974-1975 school year. The twins spent their first term together in the reception class to familiarize themselves with the new school. They were then separated from each other into parallel classes at the beginning of the school year. They remained in their classes for a term, with no special intervention procedures, to determine the effect of simple separation on their speech and intellectual development. Both girls were then given language training from February to June.

The psychologist spent half an hour every week with each child individually in a specific language training situation, the aims being to:

- (1) teach the functional usage of speech,
 - (2) increase sentence complexity and length of semantic expansion (Cazden, 1966),
 - (3) teach the usage of different parts of speech and increase vocabulary.
- Clear articulation and pronunciation were not stressed, intelligibility being the criterion for communication rather than grammatical correctness.

The materials used included Zero Book (Macdonald Educational), small books available in the school to be used as visual stimuli for discussion, nursery rhyme books for repetition and rhythm in speech, and materials from the Peabody Language Development Kit (Dunn *et al.*, 1968), i.e. stimulus cards, plastic fruit, posters, mannikins and clothes. A programme for the varied use of materials was devised.

The twins separately attended a remedial group of ten children on alternate mornings, most of whom also showed speech retardation. This was a regular provision of the school. The psychologist provided materials and advice for language training to the remedial teacher, and gave demonstrations of how to conduct language training in the group. A programme of specially designed instruction sheets was also provided to stimulate thoughts on how to use the materials.

The psychologist discussed the study fully with the two class teachers and suggestions were made as to how they could stimulate speech in the classroom. Contact was made every week so that progress and difficulties could be reported. The weekly meetings also provided an opportunity to give encouragement and support for their attempts, as well as positive feedback from the special language training sessions.

The language training phase of the study was designed to be carried out during the normal school routine, without making special demands on the teachers who

were working under the usual under-staffed conditions in urban education. The only additional resource was the weekly visit by the psychologist to the school.

RESULTS

Psychometric and linguistic assessments were made using a variety of tests, before and after separation from each other and after language training. These were administered by psychologists experienced in testing children and the same person re-tested the twins to reduce intertester variability. Tester bias could not be totally eliminated under the conditions of the study, and familiarity with the tester may have affected re-test results (Sachs, 1952; Zigler and Butterfield, 1968).

1. *Linguistic assessment*

Results on the Reynell Development Language Scale (Reynell, 1969) demonstrate clearly the acceleration in both comprehension and expressive ability in both girls during the period of intervention (Table 1).

The initial administration of the Edinburgh Articulation Test (Anthony *et al.*, 1971), after separation of the twins, indicated that their speech was immature rather than deviant in pattern. This "diagnostic" information was necessary to determine the type of language training that would be used (Menyuk, 1964; Morehead and Ingram, 1970). On reassessment after language training there appeared to be no particular progress in articulation although the re-test was considered to be unreliable. Both girls lacked their upper incisors during the reassessment.

TABLE 1. GROWTH IN THE TWINS' LANGUAGE OVER THE COURSE OF THE EXPERIMENTAL YEAR AS RECORDED BY THE REYNELL DEVELOPMENTAL LANGUAGE SCALES, EXPRESSED AS AGE-SCORES IN YEARS AND MONTHS

Chronological age:	5-4	6-4
Reynell age scores		
Comprehension		
Twin A	3-4	Above 6
Twin B	3-8	5-1
Expression		
Twin A	3-0	6-0
Twin B	3-6	5-3

2. *Intellectual assessment*

The results on the Wechsler Pre-School and Primary Scale of Intelligence (Wechsler, 1967), showed an increase in standard scores during the period of separation. However, apart from the 12-point increase in the verbal score for Twin A none of the increments appear greater than would be expected from retest effects. During the language training period, of 5 months, there was a much higher rate of acceleration of abilities, bringing the girls up to a level of their peers. In the classroom after the final assessment, the teachers reported that the girls were functioning well within the mid-range of the class, whereas on admission they had been at the bottom.

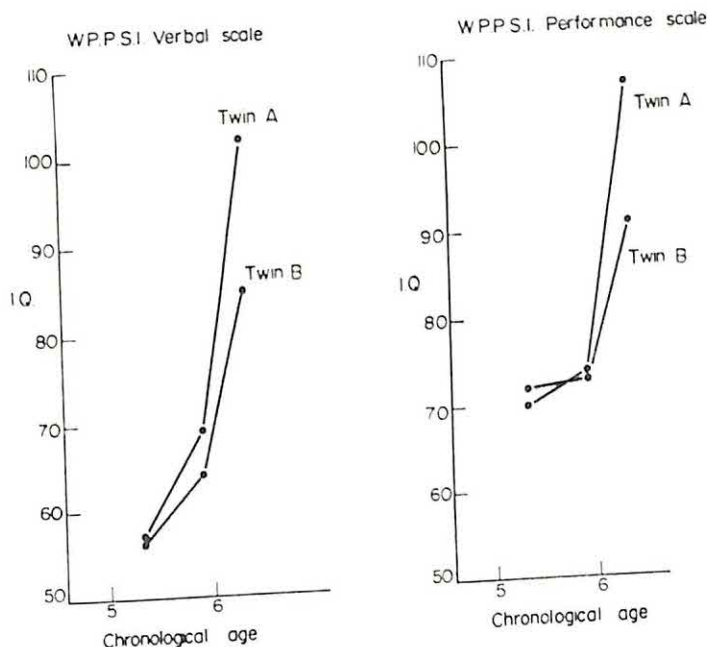


FIG. 1.

The large score increases on both verbal and performance items indicate that the language training period affected not only verbal items, but other cognitive functions as well. No specific training was given in perceptual-motor tasks over and above that ordinarily provided during the normal course of education. During the course of intervention the significant discrepancy between verbal and performance scores ($P < 0.05$; Wechsler, 1967) was eliminated.

During the period of language training the twins started to demonstrate a divergence of abilities. On their initial assessment the girls had been virtually identical in their intellectual functioning, although a floor effect in the tests may have accentuated this. They finally diverged to show a 19-point difference in Full Scale Scores.

Other psychometric test results also demonstrate the development in intellectual functioning in the twins although the actual scores differ widely (see Table 2). The validity of the Stanford-Binet (Form L-M Terman and Merrill, 1961) for British children has been seriously questioned by several studies (Himmelstein, 1966; Phillips and Bannon, 1968; Berger, 1970), which suggest that the scores could result in serious misclassification particularly for children well above or below the average range of ability. The standardization sample of the WPPSI included both minority and culturally deprived groups and its evaluation on a British sample (Yule *et al.*, 1969) supports the view that it is comparatively well-standardized test for British children, therefore, the scores obtained on the WPPSI may reflect the intellectual functioning of the twins more accurately than the Stanford-Binet.

The English Picture Vocabulary Test I scores (Brimer and Dunn, 1962) were influenced by a floor effect on the first administration which elevated the pre-intervention results. The scores obtained after language training were well below

TABLE 2. PSYCHOMETRIC SCORES OF THE TWINS EXPRESSED AS STANDARD SCORES DURING THE DIFFERENT STAGES OF INTERVENTION

Chronological age	5 yr 4 months (before separation)	5 yr 11 months (after separation)	6 yr 6 months (after training)
Twin A			
Binet (L-M)	71 (-1.80 SD)	—	89 (-0.70 SD)
E.P.V.T.I.	77 (-1.55 SD)	—	80 (-1.35 SD)
Goodenough	53	68	75
WPPSI (Full Scale)	60 (-2.70 SD)	68 (-2.15 SD)	105 (+0.32 SD)
Twin B			
Binet (L-M)	71 (-1.80 SD)	—	85 (-0.95 SD)
E.P.V.T.I.	71 (-1.95 SD)	—	77 (-1.55 SD)
Goodenough	65	85	85
WPPSI (Full Scale)	60 (-2.70 SD)	65 (-2.35 SD)	86 (-0.95 SD)

the WPPSI results, but as training was geared more to a functional usage of speech rather than increasing vocabulary this would be expected.

The Goodenough-Harris results (Harris, 1963) were considered unreliable for Twin A as she seemed opposed to drawing any realistic objects, while her sister would happily sit down and draw. Twin B's scores are, therefore, thought to be indicative of her ability.

DISCUSSION

The acceleration in the twin's level of functioning makes it highly unlikely that brain damage or mental retardation could account for the speech delay. The twins' response to a remediating environment suggests that early environmental factors were responsible for their delayed development.

Twins are known to be generally delayed in their speech development compared to singletons (Rutter and Mittler, 1972). Zazzo (1960) has also postulated the "closed communication system" of the twin situation as contributory to this finding. The case history of these twins indicated that they had been thrown very much into each other's company during their early years. Their frequent change of caretakers during their first year and their subsequent stay with their depressed and isolated mother in poor housing conditions would have exacerbated their dependence on each other. The severe degree of speech delay can, therefore, be assumed to be a result of deprivation of consistent and adequate interaction with adults as well as the "twin situation". The training procedure was designed to stimulate language as a functional method of communicating, enabling ideas and information to be exchanged between the adult and child and of introducing the twins to alternate and new ways of structuring their experiences.

The twins' placement in the two-form entry school had an effect on their development without special training. Changes were observed during the period in the reception class and initial separation.

In the reception class they learned to play separately while in the same room and during the term of separation they began to work and relate as individuals. Initially they repeatedly went to each other's classroom, but by the end of the term the proportion of class time spent doing this had greatly reduced. This was an important

phase of adjustment for the girls even though there was no significant psychometric change in their level of functioning. But the rate of acceleration of development that the girls showed was markedly below that achieved during the training phase. We can infer from this that the twins might have continued to improve without intensive intervention, although the time taken to catch up with their peers would have been much longer. The problems associated with their speech delay might have been prolonged and perhaps exacerbated as they grew older.

Emphasis has been laid on the importance of language training during the experimental phase, but this cannot be separated from the general increase in the teachers' positive expectations of the children's performance, which was deliberately engendered by the psychologist. The regular discussion times provided positive feedback to the teachers may have been an important factor in altering their response to the twins in the class.

Finally, the rare set of coincidences that made this study possible should be emphasized. First, the twins were placed in a nursery school which accepted early referral for special educational placements. Second, the referral was passed to a psychologist who was aware of the Soviet twin study and was concerned to assess the potential development of the children. Third, it was possible to re-house the family on the basis of psychological recommendations and place them in the catch-area of a two-form entry infant school where the headmistress, with her background of successful fostering of a deprived child, and her staff supported the idea of remediation of early deprivation. Finally, psychologist time was available at the crucial point of school transfer to plan and implement the study. All of these factors were important for the completion and successful outcome.

This study has clearly shown that the severe degree of developmental delay shown in these twins at the age of 5 yr could be remediated within 1 yr so that both girls were well able to cope with normal schooling. A follow-up discussion with the headmistress after the end of the training period indicated that both twins had maintained their level of progress and would be transferring to junior school with the rest of their year group.

SUMMARY

Severely speech delayed twin girls were separated into parallel classes and given language training with the aim of remediating the effects of their early deprivation. The acceleration in their linguistic ability was paralleled by marked increase in intellectual functioning as measured by standardized psychometric tests.

The relationship between language training and intellectual development is discussed, together with the importance of a structured language training programme with an adult in an interactive teaching situation.

Acknowledgements—We would like to thank Mrs. Dewerson, the Headmistress; the class teachers and the twins' parents for their help and co-operation during the study, and Miss P. Yergatian for her patient typing of the manuscript. The material for this study was collected while at the Department of Psychology, University of Birmingham.

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ANNOTATION

INDICATIONS AND CONTRA-INDICATIONS FOR THE USE OF FAMILY THERAPY

S. WALROND-SKINNER*

FAMILY therapy can be defined as the psychotherapeutic treatment of the family system using as its basic medium conjoint interpersonal interviews. It includes many sub-specialities, the most important of which is conjoint marital therapy—which addresses itself to the marital system, in the same way that family therapy focuses on the family system. For the purposes of this annotation, the literature referring to indications for both family and marital therapy will be discussed.

A variety of problems confront the theorists who would attempt to define the conditions which indicate or contra-indicate the use of family psychotherapy as the treatment of choice for emotional, psychiatric and behavioural disorders. Not least of these is the immaturity of the subject itself—family therapy having been recognized as a valid psychotherapeutic modality for barely 20 years. Stein (1969) for example, writes of the “experimental, evolutionary and partial quality of most investigations in the family field”. Hence it would be true to say that family therapy is still at a “pre-theory” stage of development, with practitioners and researchers simply lacking sufficient experience of their subject to be able to offer anything approaching a definite set of conditions for its use. Empirically based and properly controlled outcome studies into the effectiveness of family therapy are almost entirely lacking (Wells *et al.*, 1972) and whilst work specifically focusing on the outcome of conjoint marital therapy has been rather more widespread (Gurman, 1973; Gurman and Rice, 1975) this too is inconclusive. Lacking too is any established taxonomy of family types which would enable the practitioner to move outside traditional psychiatric nosology into a genuine systems framework of interpersonal disorders (Walrond-Skinner, 1976).

The practitioner, working at this pre-theory stage and requiring some guidelines for case selection, develops working metaphors to describe the conditions which appear to him to respond favourably to treatment. Skynner (1976), for example, talks of a “kind of sandwich distribution regarding the suitability for group treatment whereby the most primitive levels of development and the more sophisticated levels could use group situations fruitfully . . . while the level intermediate between these ‘top’ and ‘bottom’ levels requires a dyadic relationship”. Obviously, such metaphors, arising out of the day-to-day experience of the practitioner, provide fruitful ground for developing hypotheses. The danger arises when apparent confirmation of the metaphor’s accuracy occurs subtly over time. It then becomes enshrined not as the product of controlled research, yet inappropriately takes on the status of scientific fact.

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A further difficulty needs to be borne in mind. The term family therapy describes a modality, which in turn embraces a complex range of methods, each employing treatment techniques specifically suited to the particular approach being used. Modality, method and technique—each is addressed to a different level of therapeutic functioning and the sometimes muddled and contradictory statements made about treatment indications may result from a confusion between these three levels. For example, family therapy might be dismissed out of hand because the family seems poorly motivated to come to the clinic; shows little interest in gaining insight into its difficulties and is beset by grave environmental problems of a material nature. What may at first seem a contra-indication for the modality, may turn out instead to be a contra-indication for one of its methods (in this case, the psychoanalytic approach) and an indication for another (in this case, the structural approach). The major part of this annotation is concerned with the current state of discussion regarding indications and contra-indications for the modality not its widely differing methods or technical approaches.

A final problem worth mentioning is the fact that few writers have attempted to assess the relative merits of family therapy versus other psychotherapeutic modalities with the same kind of problem, an exception being the work of Wellish *et al.* (1976). As the report of the Group for the Advancement of Psychiatry (1970) points out "the problem is whether there are indeed particular conditions that respond more easily to family therapy than to other forms of treatment". This report found that in considering the indications for family therapy compared with other types of therapy, 83% of questionnaire respondents expressed interest in comparing the outcome of family therapy with various forms of individual psychotherapy, whereas only 47% made a conscious choice between family therapy and any form of group psychotherapy. As regards a comparison with other types of treatment interventions such as behaviour modification, chemotherapy or in-patient treatment, the situation is even bleaker, a notable exception being the work of Langsley *et al.* (1968), where the effects of family therapy are compared with the effects of hospitalization.

A search of the literature from approximately 1960 to 1976 is disappointing in that it reveals little in the way of any growing sophistication in its attempts to refine the clinical conditions in which family psychotherapy may appropriately be used. However, with these caveats in mind, some of the approaches that are made to the problem will be considered.

THE "EXCLUSIVE APPROACH" POSITION

For some, the question of indications or contra-indications simply does not arise. All symptomatology becomes, for these practitioners, amenable to change through the intervention in and manipulation of the individual's most salient psycho-social system—usually his family. Family therapy (or systems therapy as it is more usually described in this generic context) is thus regarded as a new orientation to problems of mental illness and, since systems must be adapted to individuals, not individuals to systems, family therapy or systems therapy is considered to be almost universally appropriate in its application.

THE "TREATMENT OF LAST RESORT" POSITION

At the other extreme are those who employ family therapy when all other treatment modalities have failed, and the failure of other treatment interventions is hence the criterion for employing family therapy. This approach has meant that family therapy has been tried out in an impressive array of "untreatable situations". Chronic schizophrenia, recidivism, child abuse, drug dependency, have all been exposed to family therapy, the treatment choice being made on the basis of absence of any alternatives.

THE "DIAGNOSTIC AID" POSITION

A different view from either of the above, is often adopted by practitioners who are mainly committed to their own discipline and its traditional tools and practices, rather than to the full-time practice of family therapy—be they psychiatrists, social workers or clinical psychologists. Conjoint family interviewing is seen as an aid to promote the more effective use of individual, group or in-patient treatment and is used either initially as a diagnostic aid to treatment selection or as an intermittent event during a crisis phase of therapy—for example, when a child is to be returned to his parents after a period in a children's home. A series of family interviews may be conducted after a schizophrenic patient has returned home in order to maintain his improvement in the community; or a once off conjoint interview may be arranged to try to discover why a successfully treated individual has found that his symptoms have recurred. The selection of family therapy for brief periods is based on the need to unlock intra-psychic or interpersonal resistance which may occur during the course of another treatment modality.

THE DIFFERENTIAL TREATMENT POSITION

Despite the difficulties discussed in the opening section, this fourth group embraces all those practitioners who endeavour to select family therapy as the treatment of choice from a range of possible treatment interventions. As has already been stated, the criteria used for selection derives more from ongoing clinical experience of "what works" than from hard research findings. One of the reasons why comparisons are difficult is that practitioners are working from very different theoretical stances and hence from different basic assumptions, so that categories are often contradictory between one writer and another. Moreover, as with any other type of psychotherapy where the therapist's own self is such a vital ingredient in the therapeutic process, the practitioner will necessarily use very personal yardsticks for drawing up his own list of indications and contra-indications, depending on the type of families and situations with which he knows he can or cannot work.

INDICATIONS

(1) Symptomatology, of whatever kind which is felt by the practitioner to be embedded in a dysfunctional system of family relationships. Wynne (1965), for example, states that some form of family therapy is indicated "for the clarification and resolution of any structural intrafamilial relationship difficulty". Here the approach is essentially directed towards the family system, with less regard being paid to the presenting symptom as an indicator of whether or not to employ family

therapy. In summary, wherever the identified patient's presenting problems are seen to be expressing the pain or dysfunction of the family system, family therapy automatically becomes the treatment of choice, unless there are specific indications to the contrary.*

(2) Clinical situations which are presented transactionally by the patient in terms of a relationship rather than in terms of an individual family member's symptomatology. For example, dysfunctional situations which are presented by one or both parties as marital conflict; difficulties involving sexual dysfunction; relationship difficulties occurring in other intimate interpersonal systems such as unmarried heterosexual or homosexual couples; parent/child or parent/adolescent problems presented as involving the system or sub-system as a whole. Where family members are themselves perceiving their difficulties in relationship terms, it is usually felt to be retrogressive for the practitioner to offer a form of treatment which focuses on one party only. The method or sub-speciality of family therapy chosen may not of course be the treatment of the whole family group on its own. In preference, the practitioner may select conjoint marital therapy (where marital or sexual problems are presented); kin network therapy (where a wide circle of relatives, friends and work associates appear to be intricately involved in the problem); or multiple couples/family therapy (where strong positive or negative transference feelings prevent the therapist from working effectively with the marital pair or family on its own, or where the therapist is felt by the family to be too overpowering, for example, where the family has a poor sense of group identity (Lacquer, 1972). For some practitioners, multiple couples work is always the treatment of choice for marital problems (Framo, 1973).

(3) Family therapy is routinely employed by a large number of practitioners in different types of separation difficulty (although this is also given as a contra-indication by some, who feel that individual or stranger group treatment is more appropriate when an adolescent is trying to separate from his family or when a marriage is breaking up). In these situations, individual, group or in-patient treatment may often be employed by the therapist alongside family therapy (Byng-Hall and Bruggen, 1974).

(4) Writers working largely from within a psychoanalytic conceptual framework highlight the usefulness of family therapy when members of a family are "functioning at a basically paranoid-schizoid level, with part object relationships, lack of ego boundaries and extensive use of denial, splitting and projection" (Skynner, 1969). The rationale used is that in these families, basic psychological features, normally located within the individual, are "scattered" between family members. Hence it is only by assembling the whole group, that the therapist can hope to attend to the various split off and projected intra-psychic attributes of each individual. Family therapy enables individuals to reality test some of their paranoid phantasies, hopefully with positive effect, enabling each to begin to reintegrate the projected negative parts into themselves again.

(5) Finally, family therapy has been successfully employed with "hard to reach" disorganized families who would not normally be able to mobilize sufficient re-

*This would be the traditional position by all the major writers on family therapy.

sources to enable them to participate in a sustained therapeutic programme. Again, the use of family therapy with low socio-economic, severely deprived families with poor verbal skills is sometimes cited as a contra-indication; but Minuchin *et al.* (1967) as well as many others have convincingly shown that family therapy, employing an active, directive approach to problem-solving, is often the only intervention that is likely to be effective.

CONTRA-INDICATIONS

(1) Practical limitations. The physical or psychological unavailability of crucial family members is the first practical consideration for the family therapist to bear in mind. Family members may either be dead, geographically distant or completely unmotivated to engage in any type of therapeutic work. On the other hand, it may be the absence of appropriately experienced and personally suitable therapists that prevents the employment of family therapy in a particular agency or area, even when families seem well motivated and where, from other points of view, family therapy would be indicated.

(2) Often family therapy is contra-indicated because the situation has been presented too late to offer the family therapist much hope of bringing about constructive change. In other words, the prognosis may simply be too poor to warrant the necessary expenditure of effort. Ackerman (1966) for example, cites as a contra-indication "the presence of a malignant irreversible trend towards break-up of family which may mean that it is too late to reverse the process of fragmentation". Here, of course, those family therapists who engage in divorce therapy would not necessarily agree, though even those would generally admit that the desire to separate relatively undestructively would be a necessary pre-requisite for commencing treatment.

(3) The dangers of engaging in family therapy with some families are frequently alluded to, where the emotional equilibrium is so precariously maintained that attempts at changing the relationship system may precipitate a severe decompensation on the part of one or more family members. Many apparently highly stressful interpersonal situations are ego-syntonic for the individuals involved, and attempting to upset this balance may mean that the last condition becomes worse than the first (Pittman and Flomenhaft, 1970). It may also be felt to be psychologically dangerous to engage in family therapy where one or more members are organically ill, since the sessions might either increase the level of stress intolerably for that member or might raise unjustifiable "magical" hopes in other family members that the family member's organic symptoms will be removed.

(4) Families where one or more members are depressed are often considered to respond poorly to family therapy, since the depressed member may find it difficult to participate meaningfully in conjoint sessions, or to share a therapist. The same rationale may contra-indicate family therapy for severely emotionally deprived individuals. However, in both of these situations the use of individual psychotherapy for the symptomatic members, in conjunction with the conjoint sessions may well enable family therapy to be productive.

(5) Finally, it may sometimes happen that the family therapist is asked to take

on the treatment of a family by an agency such as a Court or School and where, unbeknown to the therapist, there is a hidden agenda to be fulfilled (Zuk, 1976). The family therapist may suddenly find himself forced to collude with an external decision-making process where, for example, his prior commitments of confidentiality to the family is called into question by a third party. Families where child abuse is suspected may, for example, involve the family therapist, if he is not extremely careful in making written statements or court appearances in favour of one part of the family against the other—a position which is always inimical to his role as therapist to the whole system. It may ultimately be quite harmful to the family to begin treating these situations via family therapy, where there are severe entanglements between the other agencies involved in the treatment.

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ANNOTATION

"SOFT" NEUROLOGICAL SIGNS AND LATER PSYCHIATRIC DISORDER—A REVIEW

DAVID SHAFFER*

A NUMBER of neurological signs have been described as occurring more frequently in groups of children with behaviour or learning problems than in "normal" children (Adams *et al.*, 1974; Kennard, 1960; Rutter *et al.*, 1966; Stine *et al.*, 1975; Wolff and Hurwitz, 1973). Such signs include involuntary movements of a choreic or athetoid type, motor abnormalities such as synkinesis (mirror movements), dysdiadochokinesis (difficulty in performing rapid alternating movements) and general clumsiness as well as sensory abnormalities, in particular dysgraphaesthesia (inability to identify or reproduce shapes outlined by the examiner on the palmar surface of the child's outstretched hand).

Such signs are often referred to as being "soft". Rutter *et al.* (1970a) have pointed out that the term "soft" is used to describe different groups of signs for quite different reasons. Some are labelled "soft" because they run a developmental course and do not have any clear locus of origin. Such signs are not pointers to disease in the traditional sense and their pathological roots are obscure. Most of the signs mentioned above, all of which are age-related (Peters *et al.*, 1975), would come into this category. Most, however, can be elicited readily and reliably (Rutter *et al.*, 1970a). A different group of signs are considered "soft" because they are minor in degree and because they are difficult to detect in a reliable fashion. Such signs would include reflex or tone asymmetries.

Soft signs occur in many otherwise normal children. Thus Adams *et al.* (1974) found that 10 per cent of 9–11-year-olds without behaviour or learning problems had dysgraphaesthesia and 8 per cent dysdiadochokinesis. Rutter *et al.* (1970a) found that 14 per cent of normal 10–11-year-olds showed mirror movements, and Wolff and Hurwitz (1966) found that choreatiform movements could be elicited in 11 per cent of normal children.

Almost all studies have shown a relationship between the presence of these signs and age and I.Q. They are also sex related, and for a given age and I.Q. occur more frequently in boys. When such factors are taken into account many signs fail to discriminate between problem and nonproblem children, although both dysdiadochokinesis and dysgraphaesthesia are found more often in disturbed children even

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after taking account of age, sex and I.Q. (Adams *et al.*, 1974; Myklebust, 1973; Peters *et al.*, 1975). We do not know whether the association with disorder is increased if such signs persist into adolescence or adulthood. However, a number of studies have appeared over the past decade which suggest that they are found especially often in older patients suffering from particular types of psychiatric disturbance. The studies have been such that it is not possible to tell whether the soft signs have been present since childhood, nor is it possible to determine what—if any—type of disorder would have been diagnosable during childhood.

The association was first noted by Hertzog and Birch (1966, 1968) who examined successive cases admitted to the adolescent service at Bellevue Hospital. A high proportion of psychotic patients were reported to have abnormal "soft signs". However, these studies were uncontrolled, did not take account of current drug intake, included patients with frank neurological disease and also listed hyperkinetic behaviour as a soft sign. In a somewhat more satisfactory study, Rochford *et al.* (1970) examined 65 random admissions to three adult psychiatric units. Examination took place after a drug-free period of 48 hr and 20 staff controls were studied as well. This study found an excess of soft signs among schizophrenic patients and patients diagnosed as having a personality disorder but no excess in patients with an affective illness. It is questionable whether the drug-free period was of sufficient length and the use of staff controls would have rendered the study non-blind.

Mosher *et al.* (1971) have undertaken a clinical neurological examination on 15 pairs of identical twins discordant for schizophrenia. Eleven out of 15 of the discordant twins had abnormal signs compared with three out of 15 of the unaffected siblings. The authors are cautious about drawing conclusions from this study for the probands differed with respect to previous intake of phenothiazine drugs, *e.c.t.* and hospitalization. Nor can this study indicate whether abnormal findings are specific for schizophrenia. In most twin studies there is an excess of perinatal abnormality and so no conclusions about the prevalence of signs amongst schizophrenics can be drawn.

The most satisfactory investigation has been that by Quitkin *et al.* (1976). Earlier studies had suggested to these workers that adult schizophrenics who had experienced marked personality difficulties in childhood (characteristically being friendless, having academic difficulties and narrow interests) were especially likely to have a neurological abnormality for they often gave a history of delayed developmental milestones, learning problems at school and had uneven score patterns on psychometric examination. They labelled this group Schizophrenia with Premorbid Asociality (SPA). For similar reasons they suspected an organic basis in certain patients with a personality disorder. These were patients who were characteristically antisocially impulsive and who had frequent but brief non-reactive mood swings. They have called this group Emotionally Unstable Character Disorder (EUCD). In the study under discussion, they examined 298 consecutive admissions under the age of 50, none of whom had organic neurological disease or had been treated previously with *e.c.t.* All patients were withdrawn from drugs for at least 10 days before examination. The reliability and consistency of the examination was systematically assessed and was carried out blind to the psychiatric rating. Both the SPA and the EUCD groups differed from other diagnostic categories in more com-

monly exhibiting dysdiadochokinesis, agraphesthesia, mirror movements, finger apraxia and disturbances of speech and gait. There was no excess of such signs in patients with other forms of schizophrenia, affective disorder or other types of personality disorder. The importance of a drug-free period was emphasized by a subsidiary finding of a high prevalence of signs in a group of diagnostically mixed patients receiving drugs.

These studies suggest that disturbed children with neurological dysfunction may develop specific psychiatric syndromes in later life. It is not clear, whether later disorder is directly related to persisting C.N.S. abnormalities or whether the association is more oblique. It may be, for example, that the link is through the experience of earlier school or learning difficulties. Before drawing conclusions about the nature of the association it would be necessary to examine the correlates of soft signs in an unselected adult or adolescent population and by longitudinal research, to identify the factors associated with the disappearance or persistence of these poorly understood clinical phenomena.

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CRITICAL NOTICE

Child Psychiatry: Modern Approaches. Edited by MICHAEL RUTTER and LIONEL HERSOV.
Blackwell Scientific Publications, Oxford, 1977, pp. xiv + 1024. £21.50.

THIS BOOK is simply splendid—not flawless, but splendid (which, according to my Webster's dictionary, means brilliant, grand, outshining the usual or customary, illustrious, excellent). It is the text all of us have been waiting for. I have already assigned it as the basic reference source for our trainees, both graduate and undergraduate. If I could, I would make so scholarly, incisive and authoritative a volume required reading for all practitioners who work with children. That may sound like excessive praise, but I can attest to the intellectual stimulation the book provided me despite (or perhaps because of) 25 years in the field. Rutter's chapters on development, Shaffer's on brain injury, Hersov's on school refusal, Rutter and Yule's on reading difficulties, Corbett's on retardation and Yule's on behavioral approaches are particular gems in a book studded with excellent contributions.

If the first edition of Kanner's *Child Psychiatry* in 1935 be taken as an announcement of the birth of our field as a speciality, Rutter and Hersov (hereinafter R and H) signals its coming of age. By any system of accounting, there has been an enormous growth in the empirical and theoretical foundations of child psychiatry in the 42 years between these two events. By far the most important contribution to that growth has come from the Bethlem Royal and The Maudsley Hospital and the associated postgraduate medical school, the Institute of Psychiatry. It is therefore particularly appropriate that this textbook should be edited and written by past and present members of The Joint Hospital staff.

Until now, child psychiatrists have tended to be regarded by their adult colleagues with an amused tolerance. What we do has been regarded as a decent sort of thing, humanitarian and all that, but rather a bit like what a kindly grandmother might offer a troubled and unhappy child, necessary but hardly medical. Many of us have resented the condescension but have remained troubled by feelings of inadequacy, much like the relationship between pediatricians and internists a generation ago. It would be too much to claim that the information assembled in this book will bring us the professional recognition pediatrics has belatedly achieved, but I, for one, feel better able to hold my head up when I acknowledge my specialty. No, we do not have all the answers and we never will, but we are discovering the important questions and how to go about approximating their solutions.

R and H is flawed and the remainder of this review will be devoted to an assessment of its shortcomings, with the reader reminded they do not seriously detract from the grandeur of the accomplishment. The Preface makes clear the intent to provide a textbook of child psychiatry. Though by far the best text yet published, R and H falls a bit short of the mark in that some of its sections read more like a critical review of the literature than an integrative summary. That is, although the several authors have not hesitated to assess the reliability of what passes for data and theory in the literature of our field, many have been unduly reluctant to put together a systematic account of what, on present evidence, would seem the most likely way of accounting for a given disorder. It is possible to take the position that a serious student should do the integrating himself or herself; indeed, all of us must learn to live with the ambiguities and uncertainties that make integration difficult. I would argue, however, that a textbook has more of a responsibility to pull things together than a volume of *Advances In . . . or Critical Reviews of . . .*

A few of the chapters are so condensed as to be of limited use to the beginner. Dare's chapter on psychoanalytic theories epitomizes the similarities and differences among the analytic positions of Sigmund Freud, Anna Freud, Melanie Klein, Erik Erikson, Margaret Mahler and D. W. Winnicott. For the psychoanalytic sophisticate, this is a remarkable condensation and an instructive comparison, but I doubt it will be intelligible to the novice. In contrast, his chapter on dynamic treatments provides a trenchant summary of the fundamental elements in psychodynamic psychotherapy. It is obvious that a Chapter of 17 pages cannot provide a "how to do it" kit but the careful reader will be alerted to the special aims and basic premises of the psychoanalytic approach. Bryant, in trying to

say something useful about Piaget in limited space, faced a particularly difficult task. Even if one sets aside the enormous corpus of work Piaget has produced and simply considers his basic concepts and the evidence on which they are founded, one discovers that it took Flavell in *The Developmental Psychology of Jean Piaget* 462 pages to do it. How, then, does one manage to convey to the student what Piaget is about in fifteen? Bryant's solution, a very reasonable one under the circumstances, is to limit himself to a very few Piagetian concepts and to identify the interpretations alternative to them, as these can be tested by crucial experiments. What he has written is stimulating and provocative but it provides only the most bare-boned introduction to Piaget. I would hope that Bryant could be encouraged to prepare an expanded version for the second edition of R and H, one with a more extensive outline of the elements of Piaget's theories, although I recognize that space provides a serious dilemma in the preparation of a textbook if a multi-volume unmanageable encyclopedia is to be avoided.

The predominant focus on the British scene, inevitable from the choice of authors, has at times resulted in a degree of parochialism that may be more of a disadvantage for the British than the American reader. For the latter, the local emphasis is a very considerable asset because the references to the non-psychiatric literature (educational, psychological and sociological) are less likely to be familiar to us. In most instances, extrapolations from local peculiarities of law or differences in terminology are not difficult to make, although I am not entirely sure about the distinction among "day nurseries, play groups and nursery classes" on p. 399; indeed, I wonder whether the different names reliably describe different services in view of the loose usage of "day care", "preschool" and "nursery school" so often encountered in the States. But it might well have been instructive, for readers on both sides of the Atlantic, to have made more of a contrast in experience and practice on the two continents. For example, given the rather extensive current agitation in the States about the "right" of adopted children to identify their biological parents, it is surprising to find so little mention of it in an otherwise comprehensive and masterful chapter on adoption. At the moment, the agitation by adoptees to secure that information seems to be overmastering the objections of many adoptive parents and the uncertain attitudes of the biological parents, some of whom turn out to be quite unhappy about being "discovered" many years later. There are problems of conflicting legal rights of each of the parties with respect to the assurance given both sets of parents by earlier decrees governing adoption. Some professionals have expressed fear that lack of confidentiality for parents might discourage the practice of adoption. One can anticipate that these concerns will be shared in Britain, even if they are being noised about more loudly in the States for the moment. And it might have been helpful to consider possible reasons for the differences in perspective in the two countries.

A further example of a missed opportunity is evident in the treatment of the hyperkinetic syndrome. Cantwell contributes an excellent survey of the clinical problem (the best short summary to be found anywhere), this time very much from an American viewpoint, though one enlightened by his experience at The Maudsley. The reader is told (p. 530) about the enormous differences in estimated prevalence in the two countries (0.1% from the Isle of Wight study in contrast to going estimates in the United States which vary from 5 to 20%). What accounts for this staggering discrepancy? Does it reflect nothing more than fashions in diagnostic terminology or are there actual differences in prevalence of a clinical condition because of parenting or schooling practices, of urbanization, of social disadvantage or even, if you like, of diet? Cantwell clearly believes, as most clinicians in the States do, that the disorder is a valid clinical syndrome, though its causes are heterogeneous. Shaffer in writing on brain injury comments: "The diagnosis 'hyperactivity syndrome' is an unsatisfactory one" (p. 198) and Rutter (p. 371) shares his skepticism; yet Shaffer in writing on drug treatment proceeds to recommend therapy for this condition (p. 909): "Stimulant drugs should be considered for use with children who present with a behavior disturbance, especially when the clinical picture is dominated by poor attention, overactivity and disruptiveness in class, and when clinical and psychometric examination reveals the presence of neurological 'soft' signs, EEG abnormalities or deficits in cognitive function". Set aside for the moment the unconvincing nature of the evidence that borderline EEG abnormalities or "soft" signs predict drug response; Shaffer himself has provided a sharp critique (pp. 190-199) of the loose concept of "minimal brain damage". But the inconsistencies among and within chapters suggest a possible clue to the difference in British and American clinical practice. Is what American child psychiatrists call "hyperkinetic disorder" a variant of what our British colleagues label "conduct disorder" because of their emphasis on disturbed behavior

at home and school rather than the more elusive, if sometimes striking, manifest overactivity? I do not suggest that the editors should have legislated a "correct" position or have taken a majority vote to identify the "truth" in order to impose consistency. Quite to the contrary. The issues are anything but settled. But the differences should have been confronted directly by making the divergencies explicit and setting forth the possible reasons for them. I, for one, would have profited from the juxtaposition of conflicting opinion by so scholarly a set of authors. In similar fashion, detailed explication of U.S.-U.K. differences would have added to the excellence of the chapters on delinquency and addiction.

There are other places where the editors have opted for an exposition of basic principles without a complementary section on practical aspects. Cox and Rutter have provided the best discussion on diagnostic appraisal and interviewing to be found anywhere. They specifically eschew any intent "to provide a cookbook description of how to carry out a diagnostic appraisal". For working guidelines, the reader is referred to the bibliography. In a future edition, I would urge them to provide appropriate interview schedules which beginners badly need. This caveat does not apply to Berger's chapter on psychological testing. Here the aim is appropriately different. The physician most often will not do the testing himself or herself but will need to understand the principles of test construction and administration, how to phrase questions that can be answered by systematic testing and how to assess the validity of the assessment provided by the psychologist. The clinician who reads this chapter thoughtfully will emerge as a more intelligent "consumer" of psychological information. In similar fashion, the chapters on the EEG, genetics and chromosome anomalies are quite useful, though the last named is a bit short on the newer methodologies and on the most recent findings (there are only two references dated later than 1972 in a list of over 70, this in a field that has expanded enormously within the past 5 years).

These caveats are trivial in relation to the enormous accomplishment of the whole. But then, I confess that I expected no less from Michael Rutter and Lionel Hersov. I have bent over backwards to find things wrong with the book lest my encomiums not be believed. But try as I may, I am left with admiration for an extraordinary accomplishment. There are no two ways about it; this is now the definitive textbook in child psychiatry, a worthy successor to Kanner and a scholar's companion to Rutter's Penguin popular synthesis: *Helping Troubled Children*.

I do have one final quarrel with R and H. I have long been loath to undertake book reviewing; the reward has not measured up to the effort expended, at least for a compulsive reviewer who cannot bring himself to skim. This assignment, to the contrary, has been such a rewarding one that, on the principles of an intermittent schedule in operant reinforcement, I am likely to find myself persisting in behavior a rational man should forswear. If Skinner proves to be right, R and H will be to blame.

A word about binding. The publishers have included a note cautioning the reviewer against unfavorable comments on the price in view of the enormous inflation in the cost of production. Their warning was unnecessary; I am persuaded that this book is worth every penny. But just because of its excellence, I know the reader will be turning to it constantly. For that very reason, it deserved a more durable binding than it has. Still, better a book so well written that frequent use fragments it than one so little consulted that its binding is never challenged.

LEON EISENBERG

BOOK REVIEWS

Mothers: Their Power and Influence. ANN DALLY. Weidenfeld & Nicholson, London, 1975, pp. xiv + 223. £4.50.

DR. DALLY has written a curious and clever book which reads as a personal statement drawn from her own practice experience. A blend of common sense and imaginative flow make it difficult to categorise, which is of course part of its interest for the readers, if problematic for the reviewer. Some imaginative use of literature is mixed with case illustrations to outline her theory; which appears to be an amalgam of psychodynamic understanding and individual conviction.

To those familiar with the work of Melanie Klein or the clinical accounts of Donald Winnicott or Barbara Dockar-Drysdale, the theory introduced as new and original will not seem so; and in this the conflicting nature of the books' purpose may lie. It is avowedly written for the general reader and here I think it could succeed in conveying very successfully the range of ideas on which psychodynamically oriented psychiatrists may draw in their treatment of patients, although in many cases the clinical illustrations do not adequately demonstrate the preceding theoretical account. For the clinicians there must be a disappointment in the lack of connection between the theory and the evidence, and between this work and the published work of others in the clinical field or child and family psychiatry. This would matter less if the author had not preceded her book with a foreword stating that it contained a framework badly needed in psychiatry, psychology education and social work.

Perhaps the book is best read as a study of a mind in original pursuit of an idea. I enjoyed following Dr. Dally's mind through her work, and I am sure her ideas will provoke others into further speculation or refutation. As a controversial book about the effect of mothers on behaviour in adult life, it should also make a very good Christmas present between spouses.

GILL GORELL BARNES

Childhood Obesity. Edited by MYRON WINICK. John Wiley & Sons, New York, 1975, pp. viii + 189. \$16.95.

THE READER who looks for an answer to the basic question, "Do obese children eat more than lean?", or hopes to find in "Obesity in Childhood" a comprehensive, infallible guide to therapy, will be disappointed. What is provided, is a selective summary of studies into various aspects of this problem as considered at a conference convened to discuss this topic. The date of the meeting is not given but references later than 1973 are limited to the works of contributors to the thirteen chapters.

In the first chapter Professor Hirsch summarises the experimental data which in rats supports the hypothesis that obesity is accompanied by an excessive number of adipocytes, possibly developing as a result of excessive feeding in infancy. The factors which control adipocyte mass remain unknown. On rather poor data they conclude that until weaning there is both formation and filling of pre-adipocytes, while after three to four weeks, very few pre-adipocytes are formed. In trying to assess the relevance of these observations to obesity in humans it has to be noted that many become obese as adults and yet have excessive adipocytes. When growth, body composition and development of obesity in children are considered, it is clear that relative fatness need not be acquired early nor may it follow a consistent pattern throughout childhood and early adolescence.

From many studies it appears that to the extent that "the poor remain poor and the affluent, affluent" there is a lifelong consistency of relative fatness in the male. In the female, however, the lean poor girl may well become the impoverished obese woman. It is clear that although it has

become almost accepted that the fat infant is well on his way to becoming the fat adult, conformatory data from longitudinal studies still do not exist and cross-sectional studies are both confusing and conflicting. In general, the degree of fatness has a positive relationship to income but the reverse is paradoxically so in the adolescent female.

In the second part of the book, obesity is considered during critical periods of growth. In considering the infantile period, it is stated that there may be a genetic predisposition but in no study are all other factors adequately controlled. Positive correlations were shown with excessive maternal weight gain both in pregnancy and in post-natal life, brain damage and bottle feeding, as compared with breast feeding. Surprisingly, a history of infection early in life often is followed by obesity. It is postulated that this may be an over-reaction by the parents, leading to over feeding and thus obesity. In discussing obesity during childhood, Jean Mayer emphasised again how very precise the control of intake over expenditure is in the vast majority. Only a 3% excess of calorie intake is required to add, in the average child, 10 additional pounds per year. She reported further data which supported a genetic factor in obesity in that obesity was related to biological parents rather than to adopted parents.

When the juvenile with obesity is studied it becomes clear that psychological factors largely determine hyperphagia. Cues for eating are external and learned and not related to any recognised endogenous factor.

The third part of the book bears the title "Early Nutrition and Lipid Metabolism". The first chapter is an erudite discussion of the diagnosis and management of hyperlipidemia as a paediatric problem but does not direct itself to the topic in hand, while the other two chapters deal with atherosclerosis providing some horrific figures for the incidence of very high serum cholesterol levels in children in the United States of America and in South Africa. The author has examined the evidence which suggests that a diet low in saturated fats and supplemented with unsaturated fats, may be advantageous but as yet there is no hard data to support such a radical change in diet.

Much of the impact of Chapter 9 is lost since I fear the histograms were prepared in colour for slide projection but are incomprehensible in black and white reproduction.

The final section of the book deals with the control of obesity. In the first section, basic concepts are considered developing the hypothesis that in the obese there is an increase in adipose cell number with varying increments in adipose cell lipid content. There is the suggestion that for treatment of obesity to be effective, dietary intervention must be instituted prior to the development of the hypercellular state.

The authors report a study of 3½ years' duration of subjects aged 2-26 years. At all ages studied, the obese had a greater number of adipose cells but obese children had larger adipose cells than non-obese children and the size often overlapped the size of adipose cells in the adult. Their studies suggested that in the obese child there was a rapid increase in cellularity occurring by the age of 7 years while in the non-obese there seemed to be little increase in adipose cell counts between the age of 2 and 8. Weight reduction after the acquisition of excessive cells causes a reduction in cell size. It is hypothesised that early weight reduction by the age of six years may slow down the rate of increase of hypercellularity. The author introduces evidence that Epinephrine causes a diminished lipolytic response in cells from individuals who have been obese whether or not they are in fact overweight at the time of testing. It is suggested that this may be one of the mechanisms for genetic obesity if it does exist in man, and that early identification of abnormal growth and metabolism of fat depots coupled with therapeutic intervention prior to the attainment of a hypercellular state offers a better hope for prevention and treatment of obesity than the current multitude of dietary regimens aimed at calorie restriction.

Perhaps the most interesting section of the book deals with the attempts to treat childhood obesity by behaviour modification reported by Jordan and Levitz. It is clear that in Western society childhood eating is determined not by physiological needs but by external cues, often provided by the parents. In addition, food is often used to reinforce desirable traits and also may come to satisfy multiple emotional needs because of the association of pleasant experiences. In an effort to modify such fixed patterns of behaviour, the authors reject trying to change these in an all or none fashion thereby causing much frustration, but rather suggest that a behaviour modification programme aimed at slowly decreasing calorie intake, and increasing energy expenditure may be more effective in the long term. Human feeding should be recorded considering four major parameters: ingestive be-

haviour, including the type of biting, chewing, and so on; organismic variables such as hunger or mood; behaviours or activities associated with eating; stimuli preceding or concurrent with eating, e.g. time, place, associated persons, type of food, etc. On the basis of such detailed records it is possible to identify behaviours which lead to increased calorie intake. If these are correctly identified and assessed, it is possible by minor modifications to make a radical change in the total pattern of calorie intake. This approach has been validated in adults and in this report the author records some of the experiences in treating a small group of children. To treat children, three modifications were necessary: first, both parents and children were instructed in the programme and procedures of behaviour modifications, secondly, the treatment team and the children ate together once a week in an effort to model and reinforce appropriate eating behaviour, finally, the rewards provided when weight loss occurred were chosen to encourage desirable behaviour, for example, activities which would increase physical activity.

They do no more than claim that such an approach to management is feasible and promising. However, further follow-up would be necessary to confirm that this would not be just a short-term success. So many of the other measures which have been introduced to deal with this difficult problem have not been continued when the programme has been stopped. Hormones are rejected as not being of any value in the treatment of obesity.

This book gives a reasonable summary of the present state of confusion existing both in the definition of obesity and in understanding its pathogenesis and appropriate management. There can be no doubt however, that childhood obesity is a significant health hazard and causes much unhappiness. The thirteen chapters with almost 300 references pose many questions and propose innumerable hypotheses into what drives man to eat. The book should promote more studies to explore the validity of these hypotheses and hopefully will produce a few aimed at finding what stops excessive eating.

ALEX P. MOWAT

Case Studies in Classroom Management. DAVID GALLOWAY. Longman, London and New York, 1976. pp. xxx + 123. £2.25.

THE AUTHOR is a practising educational psychologist and the contents reflect the variety of problems that may be referred to the School Psychological Service. Interestingly though many of the solutions to these problems are placed not in the hands of psychologists and other outside agents, though the importance of co-operation and early referral where necessary are stressed, but in those of ordinary class teachers. These teachers it is argued "have found ways to help children with intransigent learning and behaviour problems without labelling them ESN or maladjusted, and without removing them to a special school".

The form of this book is unusual, consisting of the presentation of thirty imaginary case studies drawn from all ages of school children and representing a wide range of problems. Galloway has chosen several types of learning problems and a variety of emotional ones, dealing with situations both at home and school as well as some familiar conduct disorders. Drawing on a special field of interest he has included several cases based on different forms of truancy and a few which centre on the integration of partially handicapped children into ordinary schools.

In order that readers will focus on what the author sees as the basic issues, each study is preceded by two or three main points. The case is then presented in about 1000 words of clear jargon-free writing which sketches in background detail, describes the problem, details any treatment and where appropriate, reports on progress. This is then followed by 12-14 wide ranging questions designed to encourage relevant discussion.

The form of the book makes it ideal for College and Institute of Education seminars, but it should also be useful reading for anybody connected with schools and with the many problems that can be faced by children. Ideally though, because it focuses so much on the handling of individuals, it should be read in conjunction with Michael Marland's 'The Craft of the Classroom' which deals with the teachers' relationship with the class. The skills of dealing simultaneously, yet in a sensitive and imaginative way, with both individuals and the main teaching group are not easily learned. I think teachers will like the active role proposed for them in this book, though they may find the task of teasing out the complex influences of individual, home and school somewhat daunting.

PETER MORTIMORE

Young Fluent Readers. MARGARET CLARK. Heinemann Educational Books, London, 1976. pp. x + 115. £1.70.

ALTHOUGH this work replicates in part that done on precocious readers by Dolores Durkin in the 1960s, it stands in its own right as a useful contribution to our meagre knowledge of successful reading in school children. The correlates of reading failure have been exhaustively reported and a whole range of them, from cerebral dominance to social class, has been in and out of fashion over the years. Clark's thirty-two subjects were all reading fluently and with understanding on admission to school at the age of five, and it is salutary to note that not all were of superior intelligence, over a third had difficult births and a quarter had parents who left school at the earliest opportunity. Large families, below-average visual discrimination, mixed handedness, poor motor coordination are recorded for numbers of these children; and blissfully unaware that they were "at risk" they learned to read before the experts got their hands on them. A lucky escape indeed!

This study is reported with a welcome conciseness: the index, indeed, is positively frugal. A much more extended discussion of the findings and their implications would have been welcome. Much current remedial practice is based on a simplistic viewing of the correlates of reading failure. There is enough evidence in this and other studies of precocious readers to prompt a change of direction, and this book, suitably amplified, could have had an important influence here. Or perhaps Dr. Clark is holding her fire while the ammunition mounts from her continuing longitudinal studies.

LESLIE RIGLEY

Education and the Aims of Counselling: A European Perspective. Edited by TREFOR VAUGHAN. Basil Blackwell, Oxford, 1975. pp. xii + 143. £4.50.

ACCORDING to the legend on the dustcover, this book is intended to examine the proposition that specialist counselling is a new area of education, forming "a part of a watershed between the social systems of the past, and the uncertain, still to be defined patterns of the future" and also to examine "the various aims of counselling as it emerges out of a pattern of cultural change and educational reform in Britain and other countries in both Western and Eastern Europe". I approached this review, therefore, with interest and enthusiasm but regretfully completed the assignment with different feelings. A number of ideas and distinctions are introduced in the early pages as important topics for discussion but thereafter fail to be developed either at length or in depth. Key terms and concepts to which great weight is attached in the text—in particular, counselling and guidance—are never satisfactorily defined. They are also introduced in such a way as to make it difficult to interpret their meaning in all contexts. The differentiations which seem to emerge will probably be considered unrealistic rather than enlightening by most workers in the fields of education and counselling. Counselling, apparently, is good (low structure, non-direction, individuation); guidance is bad (indoctrination, direction, identification); developmental counselling is good; problem-centred counselling is inferior. In spite of the author's declared anti-U.S. bias in this field, these and other views appear more American than British in flavour. Similarly with non-directive counselling, which one had hoped was disappearing from both the American and British scenes in the simplistic form in which the author presents it.

The book has a secondary aim of introducing readers to systems of counselling in some European countries about which little has so far been published. In this respect it is more successful. I found the chapter on Rumania and Bulgaria particularly interesting. This is an area which the author and others might profitably expand. In general, however, it is a disappointing book which fails to live up to its promising beginning and operates at a level reminiscent of the themes and discussion which characterised the guidance conferences of the Sixties in this country.

PATRICK HUGHES

Seven Years Old in the Home Environment. JOHN and ELIZABETH NEWSON. George Allen & Unwin Ltd., London, 1976. pp. 436. £9.75.

THIS is the third volume in the series of studies which describes seven hundred Nottingham children growing up, and like its predecessors this work is rooted in mothers' reports gathered at home interviews. Whilst interviews, naturally, give a view of family life coloured by the mothers' attitudes these are, as the authors point out, a vital influence on the children too. The publishers blurb tends

to emphasize the book's value to practitioners, but this volume will make essential and very uneasy reading for most researchers. It provides constant reminders that our usual research methods collapse the information we gather, so completely that not only are we in danger of "simplifying almost beyond recognition", but we are by then (i.e. after analysis) all too often in a position of logical no-return, unable to make best use of our findings. When at the outset of a new study we sample from a universe of variables we can only do so from within our own experience, although we tend to regard this, together with 'knowledge of the literature' as sufficient. This is the kind of work that gives a much needed sampling frame for variables. The richness of its material will also help to save us making fools of ourselves with, for example, the "rather glib and simplistic idea that educational and emotional deprivation both increase equally towards the lower end of the social scale", and with the usual simplified ideas about birth order effects.

Two small irritations are that not all footnotes are fully referenced in the bibliography, and that it would help to know a little more about the mothers—I confess that my view of 'student psychologist's wife' changed when I discovered her to be "highly educated"!

We can look forward not only to the work on the experience of school but also to the longitudinal perspective, which is promised when the children reach fifteen years, and in the meantime, as this study progresses, we can see cultural differences emerging, and the impact on family life of the growing consciousness of self.

M. E. J. WADSWORTH

Psychological Aspects of Learning Disabilities and Reading Disorders. ALAN O. ROSS.
McGraw-Hill, New York, 1976, pp. xiii + 191. £7.45.

A CURSORY glance at the voluminous American literature on learning disability will quickly convince the discerning reader that the whole area suffers from ill-conceived and poorly executed studies of ill-defined groups of children. That some children do have learning disabilities is not in doubt. How to identify such children and how to help them remains largely unclear—unclear, that is, until the appearance of texts such as this excellent one by Alan Ross.

Whilst Ross never quite gets down to the thorny problem of providing an operational definition of learning disability (partly because he ignores British work in this area), he nevertheless goes a long way towards achieving his stated aim of linking research findings to classroom practice. He provides a useful historical overview of the development of the concept of "learning disability" in America, and demonstrates how the concept of "minimal brain dysfunction" has little practical utility.

As befits an applied psychologist, he looks to psychological processes to find explanatory models for learning problems. He starts from Gagne's analysis of learning, and concludes that whilst the total process may be interrupted at many points on the chain, two links are worthy of especially close scrutiny. There are the processes of motivation and the process of selective or focused attention, as discussed by Berlyne.

Ross particularly discusses selective attention as being the psychological process most frequently implicated in studies of children with learning difficulties. He reviews recent empirical studies and concludes that this is indeed a developing characteristic, which is delayed in children with learning disorders. A better understanding of how children learn to focus their attention and how they learn to inhibit their distractibility should lead to more valuable methods for effective intervention.

In the meantime, Ross comes down strongly in favour of phonic methods as being the best thought out ways of introducing children to reading. Adding techniques from behaviour modification to motivate children in the way that Staats has demonstrated, and Ross suggests that we already possess powerful techniques for teaching poor readers.

Overall, this is a very well-organized and well-written text which covers a great deal of ground succinctly but interestingly. Ross adopts the stance of an applied child psychologist and with his broad social learning theory background he demonstrates that the applied scientific approach is a powerful model for analysing difficult subject matter. This deserves to be a widely read book and should become very influential. It is strongly recommended to all applied psychologists, remedial teachers and other professionals interested in helping children with learning disabilities.

WILLIAM YULE

Residential Treatment and its Effects on Delinquency (Home Office Research Studies, No. 32). D. B. CORNISH and R. V. G. CLARKE. H.M.S.O., London, 1975. pp. v + 73, £1.00.

RESIDENTIAL care for children has been a long-term concern of many psychiatrists, social workers and psychologists. In view of the considerable changes it imposes on children, both in terms of the environment as well as in personal relationships, it is perhaps surprising that it has not been subject to more evaluation, whatever the difficulties (Tizard *et al.*, 1975). Rapidly rising costs might paradoxically encourage more research in this direction.

This Home Office Study is one of a long series of research reports which merit more attention than perhaps they get. The format adopted is generally clear and brief, yet impressively comprehensive, stimulating and cheap. Their subject matter may be confined to delinquency or crime but the issues raised are frequently relevant to other areas of professional interest.

The research reported in this particular study extended over a period of 8 years (1965–1973) and included a 2-year follow-up period. It attempts to evaluate primarily two forms of “treatment” at an Approved School (Community Home). Two hundred and eighty boys took part in the research, although 68 moved on to further placements and therefore did not complete their training or “treatment” at the school.

Attention is concentrated mainly on the 86 delinquents residing in the Experimental House (E), established as a “therapeutic community” (Rapoport, 1960), and on a further 87 delinquents in the Control House (C). The regime at House E emphasized democratic procedures, informality in relationships between staff and boys, and tolerance of a wide range of behaviour to allow “acting out”. House C was run on more traditional Approved School lines with “a clearly defined system of rewards and punishments based on extrinsic motivation, and a belief in the importance of habit training and character development through obedience”.

Boys for both these houses were selected on criteria presented by staff at House E as suitable for admission to their “therapeutic community”. They were then allocated randomly (with some limitations discussed by the authors) to either House E or C. Those considered not eligible on House E staff criteria were placed in a third house. They tended to be less intelligent, more retarded in their reading and to come from larger families.

The reconviction rates from all three houses were remarkably similar—House E 70 per cent, House C 69 per cent and the third house 68 per cent. These failure rates are in line with previous findings and provide no evidence of any significant change in delinquent behaviour which could be attributed to the form of treatment or training given. While the problems in conducting this research were many and inevitably imposed some modifications on the data (as the authors recognize), there would seem to be little grounds for expecting a more favourable outcome, had it been possible to resolve them.

The authors consider that there has been an over-emphasis on personality factors in delinquency, without sufficient regard being given to situational determinants. They favour a closer analysis of delinquency and its treatment (residential and non-residential) on these lines, adopting a social or environmental/learning theory approach (Mischel, 1968, 1973).

Irrespective of the issue of efficacy, there will, of course, always be a need for some residential provision for some children. However, the authors’ conclusions cannot be avoided—“The extent to which institutions can or do perform the functions of care, custody and deterrence satisfactorily (or indeed cost-effectively) should now be the subject of empirical investigation”.

This publication should be read with interest by both professional and research workers. Its findings may be unwelcome to some who have worked (like the reviewer) in residential establishments and are aware of the long and arduous hours staff at all levels give to delinquents and others. However, that is no justification for burying one’s head in the sand!

R. MALIPHANT

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The Early Identification of Educationally "at risk" Children. Edited by K. WEDELL and E. C. RAYBOULD. *Educational Review* Publication No. 6. University of Birmingham, Birmingham, 1976 144 pp. £2.50.

SYMPOSIA when published tend to be like yesterday's supper, of little interest even to last night's guests. This one is a remarkable exception. The symposium itself must have been tightly planned, not only in terms of the content to be covered but in the choice of participants. It has certainly been tightly edited. The result is one of the best statements of knowledge, practice and doubt in a very important field of applied educational psychology.

The papers are organized in three groups—those broadly concerned with concepts and aims; a section dealing with psychometric approaches, particularly to screening; and a concluding quartet of papers dealing with some examples of implementation. Each of the three sections is followed by a short summary of what must have been lively discussions.

It is difficult to single out individual contributions, but the papers in Part I (Concepts and Aims) each in their several ways make clear both the urgency of the problem of early detection and the gap which opens between statistical probabilities and the specific likelihood of a particular child being truly "at risk". Stress, too, is laid upon the fact that a disability or a disadvantage does not necessarily lead to educational handicap and that there are serious dangers in the kind of labelling to which "at risk registers" and screening procedures may give rise. Generally, the problems of the lack of any kind of direct relationship between underlying processes, or skills, and actual learning in the more or less formal situations of school, of the multifactorial and "last straw" nature of much apparent causation, and of the differential effects of the equally complex factors in the school learning situation itself, emerge in considerable detail and clarity.

The contribution of Mandl on the school readiness tests still in use in Germany (and elsewhere in Europe) brings us up with a jerk. His paper demonstrates the crucial nature of the educational decisions which are, in many systems, smudged in the first years of schooling. School readiness testing is, in a sense, a harsher version of reading readiness testing, both containing the tacit assumptions that there is a set of unchangeable demands to which the child must conform, that the differences between children are due to delays in—generally linear—series of maturing abilities and that all or most children learn in closely similar ways. None of the contributors subscribes to these views, of course; and many of them are at pains—for example, Dumont, van Bon and Hoekstra and Moyra Tyson—to demonstrate the opposite. However, pedagogic method, school organization and curricula, with their strong emphasis on the normative, upon teaching in groups and upon a uniform (if not always clearly defined) set of global goals, tend very much to the situation in which the highly variable child is confronted with a relatively rigid framework of "growth tasks" or normative demands to which he must learn to conform.

It is thus of considerable interest to note here and there, in Section II, and particularly in Wolfendale and Tansley's contributions in Section III, a re-penetration of an idea which is as old as J. M. Cattell's pedagogical laboratory—the notion of diagnostic teaching based upon, and arising out of, the teacher's growing knowledge of how this or that particular child is actually tackling the tasks he meets in school. In his account of the discussion of Part III, Wedell puts this in the broad context of the whole symposium and points to the role of the expert primarily as providing two kinds of help. The first of these is the definition, by research, of conditions and factors in the individual or the environment likely to handicap development and learning of all kinds, the assessment of probabilities and the provision of tools for assessment and diagnosis. The second is more difficult. It is that of sensitizing and training the child's educators—parents and teachers—so that their natural interventions in the child's learning can be based on an accumulating awareness of his particular capacities, weaknesses or deficits, and be of a constructive and prospective, rather than a merely remedial kind.

In my view, this book on the current state of a difficult, but very important, art, should be read not only by psychologists, school medical officers and other such peripheral professionals, but by teachers at all levels, and certainly those in the First Schools.

W. D. WALL

Snijders-Oomen Non-Verbal Intelligence Scale: S.O.N. 2½-7. J. TH. SNIJDERS and N. SNIJDERS-OOMEN. H. D. Tjeenk Willink, Gronigen, 1976. pp. vii + 60. No price stated.

MOST TESTS of intelligence rely heavily on the spoken word for administration and language for their execution. Children with any form of language handicap are placed at a disadvantage on such tests, and deaf and partially-hearing children will clearly find verbal tests very difficult. These problems have been circumvented very unsatisfactorily by testing such children on the performance or non-verbal scales of composite tests, but this practice begs many questions.

The Snijders-Oomen Non-Verbal Intelligence Scale is one of the very few scales which have been well standardized on populations of deaf children (Ives, 1967). It is very widely used in schools for the deaf in Europe (van den Horst, 1960), but much less is known of it in Britain (Reed, 1970) or America (Levine, 1974). Therefore, in introducing this review of the revised scale, I will first describe its predecessors.

The original Snijders-Oomen Non-Verbal (S.O.N.) was published in 1943, revised in 1958, and appeared in English translation in 1959 (Snijders and Snijders-Oomen, 1959). The early scale covered the age range 4-14 yr, and was standardized on deaf children. The 1958 revision extended the range from 3 to 16 yr, and data were available on 1355 hearing children as well as 1054 pupils in schools for the deaf in the Netherlands.

The 1958 version contained eight subtests, arranged in four groups—Form, Combination, Abstraction and Memory—forming two parallel forms of the scale. Gaskill *et al.* (1970) used that scale with children attending three schools for the deaf in Britain. They found that the British children scored means of 107.8, 100.0 and 105.5 in the three schools, somewhat higher than the standardization mean of 100. However, they do not comment on how children are selected for the schools, so this may not mean that the test overestimates intelligence. Of equal relevance is their finding that scores on the S.O.N. correlate highly with scores on other intelligence tests. They tested 50 children in one school and 16 in another and report correlations of 0.80 and 0.85 with Raven's matrices; 0.83 and 0.77 with W.I.S.C. Performance Scale; 0.83 and 0.72 with Colins and Drever Scale. Thus, in one of the few empirical studies to examine the value of the S.O.N. in British schools for the deaf, the scale compares favourably with other measures. Therefore, it is important to examine the new version carefully.

In revising the scale, it was decided to construct two scales, this one for ages 2½-7 yr, and an older version for ages 7-17 yr. The scale for younger children consists of five subtests, the content of which has been chosen to be more acceptable to young children and has been adapted as a result of empirical studies. The five subtests consist of Sorting (both objects and pictures); Mosaics (copying patterns, but no longer timed); Combination (placing jig-saw pictures together); Memory (finding a hidden object); and Copying (drawing simple designs). Instructions for administering subtests to both deaf and hearing children are clearly presented, as are the criteria for scoring.

The rules for converting the raw scores into mental ages and I.Q.s are complicated. Care has to be taken to enter the correct tables in the correct sequence. Separate norms are provided for Hearing and Deaf children.

The new scale was standardized on 25 boys and 25 girls at each 6 month level from 2½ to 6 yr together with 50 at age 7 and 8 yr, giving a total of 500 hearing children. The sample was carefully stratified as to urban/rural area and various other domiciliary qualifications. Unfortunately, no social class data are provided to indicate whether the 500 children are adequately representative of Dutch children. The "deaf" sample consisted of all deaf children known to five Dutch institutions for the deaf. There were 187 boys and 160 girls. Data are provided on item difficulties for both samples.

Reliability, as estimated by Kuder-Richardson, ranges from 0.50 to 0.86 for individual subtests, with that of the total score being 0.91-0.93 across samples. No validity data are presented, at least not in terms of correlations with other tests. No test-retest or inter-rater reliabilities are quoted.

This scale seems to be an important addition to the psychologist's tools for investigating young, deaf children. Judged by its predecessors, its pedigree is good. However, the manual does not provide sufficient information on reliability and validity. Hopefully, this fault will be rectified as applied child psychologists gather data on its use in practice.

WILLIAM YULE

Acknowledgement—I would like to acknowledge the help received from Miss M. Plackett, Librarian of the Royal National Institute for the Deaf in the preparation of this review.

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Let Me Speak. D. JEFFREE and R. MCCONKEY. Souvenir Press, London, 1976. pp. 171. £3.50 hardback, £1.75 paperback.

Let Me Speak is described on the dust-cover as a "seminal book on the treatment of mentally handicapped children" and "a complete teaching programme for parents . . . of children who are slow in acquiring language".

Fly-sheet descriptions, unfortunately, have a tendency to over-exaggerate, and it is unlikely that a complete language training guide could be contained in a mere 171 pages. However, whilst not living up entirely to such claims, this is an extremely useful little guide for all those involved in teaching language delayed children. The book is aimed particularly at parents. They are, after all, usually the people most concerned with the child's development, and as normal children learn language "at their mother's knee", the authors feel this experience should not be denied handicapped children. Parents' autonomy in dealing with their own children is stressed and charts are provided which make it relatively easy to identify the child's present level of language ability and to form realistic plans for treatment.

Once language development charts are completed—and the authors provide good, practical advice on simple methods of assessing and recording the child's language ability—the book concentrates on games which parents and children can play to help increase communication. The emphasis throughout is on enjoyment, for the parents as well as the child. Extrinsic rewards, other than praise, are not encouraged. Instead, the reinforcement lies in the toys and activities themselves. Clowns with eyes that light up when the child makes an approximation to the adult's sounds, or a "magic" hole in the wall through which favourite toys appear each time the child vocalizes are typical of the equipment used in the earliest stages of training. Various plays to teach tongue and mouth movements are also described.

Appropriate equipment is suggested for each stage of training. Instead of using picture books, which handicapped children may have difficulty with, to increase comprehension and naming, posting boxes, picture roundabouts and "porthole pictures" are employed. At a higher level, ingenious moving pictures, and "television screens" are used to teach verbs and pronouns. The book even provides templates to enable the more artistically inept adults to make their own equipment. Throughout the book all the apparatus used is clearly described, and if commercial equipment is required the address of the suppliers is provided.

From one-word utterances, the authors progress to ways of building up two- and three-word phrases, and eventually conversational speech. Ways of increasing co-operative play and other communicative skills are also dealt with, and although teaching through the use of games is stressed, the authors discuss how almost all everyday activities can be turned into opportunities to learn and to speak.

The main criticism to be made of the book is that it makes everything appear just a little too simple. Many children, no matter how ingenious the training techniques used, will never be able to reach the levels of conversational skill described. Imitation of sounds alone may take months and

months of training, and the three brief paragraphs devoted to this "game" may well give parents totally unrealistic views of what such programmes involve. Language training is not always simply fun, it can involve a great deal of hard work, sometimes with little reward, and parents should be made aware of the problems and limitations of this approach, at least with certain children.

However, despite this caveat, the book should provide many useful ideas for both parents and professionals involved in teaching handicapped children—and in entertaining normal children too.

PATRICIA HOWLIN

The Grasp of Consciousness. J. PIAGET (translated by S. WEDGWOOD). Routledge & Kegan Paul, London, 1977. pp. v + 360. £8.50.

I DO WISH that somebody of Piaget's intellectual stature and imaginative power would turn his attention to the psychology of creativity in old age. Why is it, that certain people retain their creative energy into an age with which one more frequently associates intellectual decline? Is it true that there are particularly many great old artists? Fairly recent examples which readily come to mind include Picasso, Chagall, Stravinsky, Casals and Klemperer. Is the reason simply that old scientists are denied access to most of our age-phobic scientific institutes while artists are allowed to continue working? Alternatively, are Piaget's qualities as much those of an artist as those of a scientist? Whatever the answer to such questions, this is a brilliantly original book. If Piaget had done no more during his working life, than to rescue consciousness from the oblivion to which psychologists have condemned it for more than half a century, he would have deserved our acclaim.

In order to make consciousness accessible to experimental investigation, Piaget proposes an operational definition in terms of the awareness of and ability to account for one's actions. After being concerned in all his previous work with the analysis of why children cannot carry out certain operations, he now turns his attention to those things they can do. However, the children's awareness of how they did these things lags far behind their ability to do them, and this applies to an activity such as crawling on hands and knees, as much as to an operation such as seriation. In fact, what children thought they had been doing was often quite different from that which they had actually done. Piaget finds that the first awareness is of the goal and of the results of the action in terms of success or failure. The means which were used to effect this, regardless of how appropriate they may have been, may remain unconscious.

Reminiscent of his previous definitions of images and language as internal representations which have to be constructed on the basis of previous actions, Piaget concludes that consciousness is not like a torchlight which is suddenly switched on to illuminate, and thereby to transform, actions. At first consciousness is linked to immediate perception and fades rapidly. But this stage of awareness becomes gradually integrated with those states that preceded and follow it within some system of representation. As reality is interpreted and conceptualized, consciousness can operate on these internal representations. This leads from mere awareness of ongoing action to considerations of potentially possible ones.

The experimental situations which provide the results for these conclusions are as imaginatively conceived as one would expect from this old master of his art. Children play tiddlywinks, build roads up hills, make balloons fly and construct Hanoi Towers. To the predictably intense irritation excerpts from the children's accounts of their actions in relation to these situations. Let us hope and pray that this time this will not again inspire these colleagues to spend their time and our money in the mindless replication of all these studies in what they are pleased to call "properly controlled conditions". In this country at least, Piaget's work up to date has mainly served to provoke countless efforts from developmental psychologists to either confirm or contradict his findings and conclusions. Instead of continuing attempts to prove that certain children in certain circumstances are able to do certain things at $4\frac{1}{2}$ instead of at 5 years of age, as Piaget had mistakenly claimed, we should use this marvellous book to give us a much needed impetus for new directions and orientations in developmental research. It will be our subjects' loss if we continue to misuse Piaget's insights by regarding them as no more than occasions for either partisanship or counter-revolution, instead of using them as a springboard for original and creative work of our own.

BEATE HERMELIN

Children's Hearings. Edited by F. M. MARTIN and KATHLEEN MURRAY. Scottish Academic Press, Edinburgh, 1976. pp. xv + 242. £5.00 hardback, £3.75 paper.

Face to Face with Families. N. BRUCE and J. SPENCER. MacDonald, Loanhead, 1976. pp. 184. £5.50 hardback, £2.75 paper.

THESE two books are the first to be published on the new system of juvenile justice in Scotland, 5 years after its inception in 1971. The Social Work (Scotland) Act 1968, which led to the changes, had a number of aims. One was to avoid dealing with persons under 16 in the courts, another was to separate the process of establishing the facts from that of disposal or treatment of the juvenile, and a third was to create a new criterion for disposal, namely "the best interests of the child". A new class of official was introduced, namely the "Reporter", whose job it was to deal with juveniles referred as being "in need of compulsory measures of care", usually because they had committed offences. If the Reporter agreed with the referring agency (usually the police) that the juvenile was in need of compulsory measures of care, he would refer the juvenile to a relatively informal "children's hearing", in which a lay panel would choose a course of action which was considered to be in the best interests of the child. In practice, the hearing could decide to take no further action, to impose a supervision requirement, or to require the juvenile to reside in a residential establishment such as a "List D" school.

There are many other aspects of the system of children's hearings beyond the bare bones outlined above and the major contribution of these two books is to describe these in detail. Most of the chapters in the book edited by Martin and Murray are factual, informative descriptions of the various elements making up the new system, by persons who "have been closely identified with the development of the hearings system, having worked within it either as panel members or as associated professionals" (p. xiv). A minority of chapters are rather more general, such as A. R. Forrest's review of theories of delinquency and Janet Hassan's discussion of interviewing, communication and decision-making. I did not find these chapters particularly informative, but they might be of interest to children's hearing panel members, for whom the book seems to have been primarily intended. The book by Bruce and Spencer is much more impressionistic, being based on questionnaires completed by panel members, observation of children's hearings, and interviews with social workers, Reporters and a smattering of policemen, sheriffs, headmasters, guidance teachers, psychiatrists and psychologists.

It seems to me that two important issues need to be resolved in connection with the system of juvenile justice in Scotland, and these are also quite relevant to the system in England and Wales. First of all, although the rhetoric and philosophy underlying the new Scottish legislation concentrates almost exclusively on the needs and welfare of the child, one wonders what happens in practice and how it is perceived by the juvenile, his parents, and society as a whole as well as by those administering the system. Second, one wonders what the effect of the new system is on the juvenile crime rate, and why. The new legislation seems to be based on certain theories about the causes of crime and the treatment of offenders, so presumably one might expect the new system to be successful in reducing crime only in so far as these theories are correct.

Neither of these issues is discussed to my satisfaction in these two books, although there are many relevant and thought-provoking sections. Beginning with the first issue, D. Watson (Martin and Murray, p. 205) argues that "far from being a system designed to further the best interests of the child, the range of disposals available shows that in fact it is designed to further the best interests of others". G. Gordon (Martin and Murray, pp. 24-25) argues that in practice the dichotomy between prosecution and referral to a hearing is more nominal than real, and that prosecution may be more favourable to a child than proceedings by a hearing. C. Godwin (Martin and Murray, Chapter 11) documents some interesting violations of the rules of procedure in children's hearings, and Martin and Murray (p. 131) note that "the decision to place a child in a residential establishment . . . is commonly seen by him as punitive".

The second issue is rarely mentioned. F. M. Martin (Martin and Murray, Chapter 3) discusses some statistical evidence and concludes (p. 40) that "we have very little systematic knowledge of the consequences of decisions and disposals. . . . The research required for any such demonstration is likely to be both difficult and time-consuming, and it is to be hoped that the necessary plans can be formulated in the near future". Bruce and Spencer (Chapter 5) try to evaluate the system on six criteria, but these do not include its effect on the juvenile crime rate.

To summarize, the two books are quite illuminating and informative, but can only be regarded as a start in the direction of evaluating the new Scottish system of juvenile justice.

DAVID P. FARRINGTON

Interaction in the Classroom. SARA DELAMONT. Methuen, London, 1976, pp. vi + 113. Hardback £3.00. Paperback £1.40.

THIS is part of a new series *Contemporary Sociology of the School* consisting of 10 short books using analyses which are based on interpretive theories. They set out to question assumptions, particularly those of traditional sociologists. Within their framework the reality of the school is seen to be socially constructed by the participants, each of whom have different roles and varying amounts of power.

In the first chapter of this book Sara Delamont, a symbolic interactionist, carefully lays out the framework of analysis that she uses. This theoretical position, largely derived from the ideas of G. H. Mead, sees humans as reflexive beings interpreting the world in the light of their own roles and experiences. The implication for research is for participant rather than objective observation and for the interpretation of data according to the insights and feelings of the actors rather than those of the researchers.

The author discusses the setting of the classroom, located not only in time and space but also in an institutional and educational context, and then proceeds to describe the pupils and the teachers. Here the book, which up to now has been both highly readable and thought provoking, is disappointing.

Pupils and teachers are described as protagonists, and conflict is seen as underlying all negotiations between them. The examples are mostly from secondary schools, thus ignoring the quite different negotiations of primary schools, and too many are from St. Luke's, the Scottish girls' school where the author carried out participant observations. As a result the quotations from pupils bear greater resemblance to the world of Jean Brodie than to that of inner city comprehensives.

Some of the material on teachers is better, in particular the importance given to the three concepts of privacy, immediacy and autonomy, and the discussion of the relationship between knowledge and control. However, the reader may feel that Sara Delamont is, if not anti-teacher, then at least unsympathetic. There are few examples of good practice, of successful class projects, of teachers acting as consultants to groups of pupils or of joint artistic achievement.

The chapter that deals with interactions between the two groups is called "Let battle commence . . .", which reflects the author's view of all interaction as negotiations in a struggle for power which, as most teachers know, is certainly a feature of classroom life but not thankfully, to the exclusion of everything else. The final chapter briefly suggests four ways in which research on classrooms could be improved.

This book offers an interesting analysis, is well written and reviews an impressive number of recent studies though, unfortunately, no reference is made to the work of Harré at Oxford or Reynolds at Cardiff, both of whom would have strengthened the author's argument.

PETER MORTIMORE

The Delinquent Way of Life. D. J. WEST and D. P. FARRINGTON. Heinemann, London, 1977. pp. ix + 209. £6.00.

THIS is the third report by the authors on delinquency in a sample of 411 working-class boys in a London area. They were first interviewed in 1961-1962 at age eight and have now been followed up for 14 years. The data presented are largely focused on information obtained from the 389 boys who were interviewed again when they were 18 (1971-1973).

Anyone who has been engaged in survey work of this nature will be sensitive to the problems of presentation—how to inform without mentally killing off the reader in the process of assimilation! The authors are generally very successful in helping him to survive, although a leisurely approach to each of the nine short chapters is nonetheless recommended. The statistical analyses are kept simple by design (Chi-square) since the authors regarded their data unsuitable for more sophisticated treatment (p. 184). However, some further teasing out of the inter-relationships between the variables, which range from "hard" measures to "soft" ratings, might have proved useful.

By 1974, 30.8% of the slightly reduced sample had become delinquent. Official crime records and self-admissions were examined and found to be closely associated. In terms of family factors and personal characteristics, most expectations are confirmed. The delinquents had poorer competence educationally, poorer job records, drank heavily, smoked more and were generally more aggressive, paying little regard to their future prospects. Much earlier assessments of "troublesomeness" by teachers and peers were good predictors of subsequent delinquency.

With the exception of parent-child rearing practices, large families, low intelligence and parental criminality were all closely associated with delinquency as previously reported. Criminal behaviour in the family was related to delinquency even where in some cases the parent's conviction pre-dated the boy's birth. Eighteen families (4.8%) accounted for nearly half of all convictions (581 out of 1217, p. 111)! Such families, of course, manifested other problems besides delinquency.

Tentative evidence is offered suggesting that conviction itself can, in some way, contribute to deterioration and not to improvement in behaviour. Some confirmation of previous work on autonomic reactivity, as measured by pulse rate, is also presented. The differences between delinquents and non-delinquents could have been reduced artifactually since the pulse counts were taken toward the end of the interview when stress would presumably have been reduced (Davies and Maliphan, 1971; Wadsworth, 1976).

The book is a strong statement supporting the existence of real personal differences between delinquents and their non-delinquent peers. As the authors suggest (without ignoring the broader social context), there is a need now for more specific and experimentally designed investigations in this vast, multi-faceted area of delinquency.

R. MALIPHANT

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Rage, Hate, Assault and Other Forms of Violence. Edited by DENNIS J. MADDEN and JOHN R. LION. Spectrum Publications, New York, 1976. pp. 265. £14.50.

AT LONG last the study of overt human violence is reaching take-off point. As always there are more research developments on the western side of the Atlantic than there are in Britain but everywhere the topic is a focus of serious discussion. It is difficult to know where psychiatry should enter into the discussion but, as one of the editors of this recent collection of papers reminds us, aggression has occupied a central place in psychiatric thinking for a long time and some forms of violence are pathological. The danger is that alluring psychiatric notions will be used to explain ordinary fighting, wars, and all other kinds of normal violence.

This volume does not fall into the trap of equating violence with pathology even though one of the editors is a psychiatrist and six other MDs contributed to it; a balanced multi-disciplinary style is preserved throughout. Inevitably the contributions vary in quality (how many reviewers of collected articles refrain from mentioning the curate's egg?). The subject matter ranges from child abuse and violence in the family to prediction of violence, the offender in court, therapy in prisons, non-human aggressive behaviour and treatment of the aggressive patient. British work (little though it is) is hardly mentioned. The book has no connecting theme but is a useful collection of reviews. I particularly liked Steadman on prediction, Anderson and Lupo on non-human violence, and Carney on the treatment of the aggressive patient. As I now have a free copy I am glad to include this book in my reference library but I would not have thought this book special enough to entice me to part with £14.50.

JOHN GUNN

Paediatric Care: Child Health in Family Practice. STUART CARNE. MTP Press, Lancaster, 1976. pp. xiii + 259. £6.50 (hardback).

This is a book written by a family doctor and intended for members of the primary health care team. It covers the whole spectrum of paediatric care in a community setting, ranging from child

growth and development and infant feeding, through a wide variety of physical disorders, to very sensible final chapters on emotional troubles of children and on cot deaths.

It is a most readable book and will commend itself to family doctors and health visitors, being concise in style and containing a great deal of homely advice which is rarely to be found in textbooks of paediatrics. From the point of view of the child psychiatrist or psychologist the chapter on psychological disorder is not likely to contribute very much, but the rest of the work could prove of considerable value as a quick reference to physical disorders.

Professor Oppè, in his foreword to the book, comments that good primary care of children can sometimes save life, and often reduces anxiety and distress. *Paediatric Care* should do a great deal to promote these aims.

DOUGLAS I. ACRES

Emergencies in Child Psychiatry: Emotional Crises of Children, Youth and Their Families. Edited by G. C. MORRISON. C. C. Thomas, Springfield, IL, 1975. pp. xxiv + 482. \$24.50.

IN HIS preface the Editor states that "more and more emphasis has been given to recognising the importance of early and direct therapeutic intervention in childhood crises". The purpose of the book appears to be to present views on the nature of such urgent situations and to offer guidance on management. The prime questions are whether these aims have been achieved, and perhaps for whom the book is intended.

The text is not actually "purpose written" but the Editor has collected together 30 independent papers contributed by 21 principal authors. Only seven of the chapters were specially written for the book and the others have been published elsewhere at varying times over the last 15 years. Individual chapters are grouped into four parts entitled: I. Introduction; II. Crisis Intervention, brief treatment and early prevention; III. Clinical Experience and Research; and IV. Treatment Planning. A wide variety of topics are covered from both theoretical and research points of view, and include papers on autism, childhood depression, suicide, school phobia and adolescence.

Considered individually, the contributions vary greatly in style and standard, and it is not possible to provide a critique of each. However, some points may be picked out. The first section might have been better condensed into a single introduction. For example, Chapter 2 is concerned with a definition of emergency, but in Chapter 3, which is more research orientated, the authors state "there are no . . . generally agreed upon definitions as to what constitutes an emergency", and follow again with a discussion on possible definitions. In Section II, a chapter comparing two clinics and socio-economic groups, and another examining family tolerance, are clearer, but there seems little justification for the inclusion of both Chapters 5 and 10, each presenting a view of infantile autism by the same author. In Section III, there is an emphasis on depression and suicide and the common phenomenon of school refusal is presented in quite a good paper by Malmquist that unfortunately only deals with one management point of view. The final Section on treatment planning provides some guidance, but on the whole would be inadequate for the child psychiatrist in training who needed a reference text to turn to in an emergency. Chapter 29, for example, on drug therapy gives quite detailed comments on individual drugs, but the reader would have to turn elsewhere for any guidance on dosage.

The method of preparing a book by collecting individual papers together results in considerable repetition and an overall lack of a sense of urgency. More concise writing by a single author quoting the different works would be of greater use to the training psychiatrist. Nonetheless, the Editor has gathered together the works of authors of high repute, and for those taking a more leisurely view of the topic *Emergencies in Child Psychiatry* is worth reading and saves the effort of seeking out the original reference texts.

H. ZEITLIN

Flats, Families and the Under-Fives. ELIZABETH GITTUS. Routledge & Kegan Paul, London, 1976. pp. xvi + 269. £5.25.

THE Artisans and Labourers Dwellings Improvement Act of 1875 empowered local authorities to buy up dilapidated housing and provide improved dwellings for the "poorer classes". Since then, especially after 1918, there have been extensive municipal building programmes. Currently, about 40% of all dwellings are rented from local authorities or New Towns.

There is no doubt that the quality of individual dwelling units has improved considerably, but there is much criticism of their social defects. Probably high rise buildings have received most criticism, especially concerning families with young children. *Flats, Families and the Under-Fives* reports a survey into the attitudes of mothers with young children living in local authority housing in Tyneside. The samples of families, all with at least one child under 5, were chosen from estates of differing age and housing provision.

The first part of the book describes the results of interviews with some 400 mothers. The mothers in flats, and to a lesser extent maisonettes, complain more about lack of play facilities and fears for their children's safety, and are more likely to feel nervous and lonely than those in houses; mothers with more than one child under 5 felt more stressed; floor level made little difference to the dissatisfaction felt.

A chapter reviews the various influences, such as economics and building techniques which may have led to the construction of high rise buildings and points out that savings in money and space are negligible. The last chapter discusses existing pre-school facilities and makes suggestions for improvement and more parental participation.

The book should serve as a valuable working paper for the local authority in Tyneside—it would be interesting to know if the suggestions have been implemented. It would be of value to workers in planning and housing rather than to readers of this journal.

The findings support those of other surveys but are presented in a long-winded way, with no examination of statistical significance, and do not extend our understanding of the complex interaction between environmental and social structures.

N. RICHMAN

Projective Techniques. BORIS SEMEONOFF. John Wiley & Sons, New York, 1976. pp. vii + 336. £9.95. Paper £4.95.

PROJECTIVE techniques, despite controversy about their reliability and validity, nevertheless continue to be used. Clinicians who find them a valuable adjunct to their assessments of patients often find it difficult to justify their use to the sceptical. Semeonoff's professed aim therefore to inform the undergraduate and general reader about projective techniques was welcome; unfortunately, his prolific and erudite knowledge of the field has made him quite unable to see the wood for the trees. In fact, this book is a very comprehensive source book describing in very great detail the administration, not only of the well-known Rorschach and Thematic Apperception Test, but of many lesser known and obscure techniques and their variants.

The author skilfully links the rationale of these techniques with issues of general psychological interest such as perception, learning and concept formation as well as personality assessment and selection procedures. It will therefore be very useful for any research worker looking for a suitable way of assessing a specific aspect of psychological functioning. The 427 references will lead the reader to even more detailed expositions. The academic, descriptive approach is evident in the way in which the techniques are classified: according to the kind of stimulus (visual, verbal, etc.), the kind of response (interpretation, manipulation, etc.) and the aim (description, diagnosis or therapy). The book, however, does not claim to be a clinical work; yet the almost total absence of clinical material, which might have aroused the interest of some readers and demonstrated the use of the techniques in practice, is unfortunate, especially as research studies are quoted frequently.

The book is too long and far too detailed for the general reader, but as a source book for interested research workers it will be unequalled. A simple short introductory text which contains academic interest in perception and personality with clinical experience in a way that might arouse enthusiasm and curiosity in the undergraduate remains to be written.

EVA HOLMES

Reading Tests in the Classroom. DENIS VINCENT and MICHAEL CRESSWELL. NFER Publishing Co. Ltd., 1976. pp. 185. £4.50.

Tree little milk egg book is the beginning of an incantation which has haunted teachers for over 30 years. You will recognize the first words in the Schonell Graded Word Recognition Test, standardized in 1945, still used by three-quarters of English primary schools, and perhaps not the best way of testing reading, although it has more than the ten words attributed to it by these authors (p. 156).

Teachers' coolness towards tests and testers has a long history which makes sound guides like this especially welcome.

It scores particularly highly in its awareness of staffroom sensitivities which it soothes away very competently. Further, it grasps more firmly than its predecessors the nettle which the technical bases of modern testing present, giving adequate information but steering clear of writing a statistical text book—perhaps too clear: I felt that standard deviation and reliability coefficient, for example, might repay fuller treatment. In general, however, one finds here a highly competent presentation of all those aspects of the testing of reading which are important to teachers, and one could only wish for a lower price to enable them to buy it, and for a decent index to enable them to use it more effectively.

L. V. RIGLEY

Gilles de la Tourette's Syndrome. (Vol. 1. International Registry). Edited by F. S. ABUZZAHAB and F. O. ANDERSON. Mason Publishing Co., U.S.A., 1976. pp. xi + 223. No price given.

THE SYNDROME described by Gilles de la Tourette in 1885 is rarely seen, but the bizarre nature of the symptoms (tics, vocalizations, coprolalia) which show affinities both to neurological and psychological processes, has ensured its continued presence in the literature. The success of the drug haloperidol in controlling the symptoms has provoked a wider interest and this is reflected in the work of Abuzzahab and Anderson, in establishing the International Registry.

This volume contains 20 papers and a summary of current knowledge of the syndrome. Two further volumes are promised as well as a Centennial 'Celebration' in 1985!

Analysis of the first 430 cases certainly confirms statistically Gilles de la Tourette's original description. In addition, the data show clearly that, of the many forms of treatment used, haloperidol is the most successful. Yet, how much deeper is our understanding of the syndrome than that of Gilles de la Tourette in 1885?

Many papers, while presenting fairly detailed case histories, are concerned with showing the effectiveness of haloperidol. Only two papers present material on non-drug treatment. One, on social aspects of the syndrome, is barely intelligible (poor translation?) and the other, on paraverbal (sic) psychotherapy, relates to one patient studied in an in-patient setting.

The contributions by Corbett and Knopp and Strayer provided the most stimulating reading. By acknowledging the existence of social and psychological factors, with their relevance to treatment, they give hope that investigation of this complex syndrome will not end with the administration of haloperidol.

DIANE LUKEMAN

BOOKS RECEIVED

- Clinical Notes on Group-Analytic Psychotherapy.** D. WILFRED ABSE. John Wright & Sons, Ltd., Bristol, 1974, pp. xiv + 192. £4.50.
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- Mental Health in the Developing World. A Case Study in Latin America.** MARIO ARGANDONA and ARI KIEV. The Free Press, New York, 1972, pp. xiii + 178. \$7.95.
- The Emotionally Disturbed, Mentally Regarded: a Historical and Contemporary Perspective.** EARL E. BALTHAZAR and HARVEY A. STEVENS. Prentice Hall Inc., New Jersey, 1975, pp. xiv + 333. No price stated.
- Paediatrics and the Environment.** Edited by DONALD BARLTROP. Unigate Paediatric Workshops: No. 2, 1974. Fellowship of Postgraduate Medicine, London, 1975, pp. vii + 106. £2.00.
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- The Growing Brain: Childhood's Crucial Years.** JOHN BRIERLEY. N.F.E.R., Windsor, Berks., 1976, pp. 138. £3.55 (paperback).
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- Somewhere a Child is Crying. Maltreatment—Causes and Prevention.** VINCENT J. FONTANA. Collier-Macmillan Publishers, London, 1975, pp. xx + 268. £3.75.
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- Man and Woman, Boy and Girl.** JOHN MONEY and ANKE A. EHRHARDT. The John Hopkins Press, Baltimore, Maryland, 1973, pp. 311. \$3.50 (paper), \$12.50 (hard).
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- Judith: Teaching Our Mongol Baby.** W. W. SMITH. NSMHC, London, 1975, pp. 16. £0.30.
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- Day Care and Severe Handicap.** Report of a survey undertaken for the British Association for the Retarded. DAVID NORRIS, NSMHC, London, 1975, pp. 47. £0.60.
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- The Pre-School Years—3rd Edition.** General Editor, WILLEM VAN DER EYKEN. Penguin Books Ltd., Harmondsworth, Middx., 1974, pp. 249. £0.65.
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- Personality and Learning—1: A Reader prepared by the Personality and Learning Course Team at The Open University.** Edited by JOAN M. WHITEHEAD. Hodder & Stoughton, London, 1975, pp. viii + 407. £7.25 (boards), £3.75 (paperback).
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- Les Peurs Enfantsines.** MICHEL ZLOTOWICZ. Presses Universitaires de France, Paris, 1974, pp. 182. No price stated.

ANNOUNCEMENT

The International Association for Child Psychiatry and Allied Professions will hold its 9th International Congress in Melbourne, Australia, 19-26 August 1978. The theme of the Congress will be "Children and Their Parents in a Changing World".

Inquiries and proposals regarding the scientific program should be addressed to:

PETER B. NEUBAUER,
Secretary-General,
International Association for Child Psychiatry
and Allied Professions,
59 East 73rd Street,
New York, NY 10021, U.S.A.

Inquiries regarding travel arrangements from the United States, Canada, Europe, etc., should be made to:

Foreign Tours, Inc.,
1140 Avenue of the Americas,
New York, NY 10036, U.S.A.
Att. NAOMI KABAK, Director
Congress and Convention Services.

EIGHTH ANNUAL INTERNATIONAL INTERDISCIPLINARY UAP-USC CONFERENCE ON PIAGETIAN THEORY AND THE HELPING PROFESSIONS EMPHASIS: MORAL DEVELOPMENT AND CHARACTER EDUCATION

THE UNIVERSITY Affiliated Program at Childrens Hospital of Los Angeles and the USC Schools of Religion and Education are co-sponsoring a 2-day conference at the University of Southern California on Piagetian Theory and the Helping Professions on February 3 and 4, 1978. Papers will be presented on many facets of Piagetian Theory as well as moral development. The afternoon sessions will include papers and Piagetian test demonstrations as well as special workshop sessions on "Counseling and ministering to mentally retarded and developmentally disabled children and adults and their parents and siblings" for the clergy. Monographs containing the papers of the previous conferences are available at a small fee.

If you are interested in submitting a theoretical or applied paper, demonstration, symposium, videotape or film dealing with Piagetian concepts and/or moral education/character development or wish further information, please contact:

Piaget Conference Committee,
University Affiliated Program,
Childrens Hospital of Los Angeles,
P.O. Box 54700,
Los Angeles, CA 90054, U.S.A.

Child Abuse & Neglect

The International Journal

Editor-in-Chief

C. Henry Kempe

*University of Colorado
Medical Center,
Denver*

This journal, which is the first to appear in a subject area of increasing concern and debate, will provide an international forum for contributors from all disciplines working in the complex field of child abuse and neglect, including sexual abuse. Contributors will primarily be from the fields of social work, nursing, medicine, psychology and psychiatry, law, police work, legislation, education and anthropology and the journal will be of vital interest to all those working in these disciplines. However, the scope extends beyond child abuse and neglect to all those aspects of life which either favor or interfere with optimal family bonding, and contributions from concerned lay individuals and child-oriented organizations will be encouraged.

The aim of the journal is to provide rapid publication for original research papers, short communications, pertinent book reviews and letters to the editor in addition to listing important meetings and the publication of the proceedings of significant international conferences on child abuse and neglect.

SOME RECENTLY PUBLISHED PAPERS

Prediction and Prevention of Child Abuse,
G.D. GRAY, C.A. CUTLER, J. DEAN &
C.H. KEMPE, *University of Colorado Medical
School, USA*

**Child Abuse. Residential Assessment and
Treatment for the Family,** M. LYNCH &
J. ROBERTS, *The Park Hospital for Children,
Oxford, UK*

**The Death of Children following Neglect — Social
Aspects,** E. TRUBE-BECKER, *Dusseldorf,
Germany*

Child Abuse and Neglect as a Public Health Problem,
P.O. PETERSON, *Department of Pediatrics,
University Hospital, Uppsala, Sweden*

New Modalities of Treatment, R.L. CASTLE,
*National Society for the Prevention of Cruelty to
Children, London, UK*

**Flexibility and Innovation in Multidisciplinary
Management of Child Abuse in Western Australia,**
J. HAMORY & M. JEFFERY, *Department for
Community Welfare, Perth, Australia*

**The Right of Independent Representation for
Children in Cases of Child Abuse and Neglect,**
B. FRASER, *National Committee for Prevention
of Child Abuse, Chicago, USA*

Handling of Child Abuse in Denmark, J. VESTER-
DAL, *Department of Pediatrics, Glostrup Hospital,
Denmark*

Medical Ethics and the Maltreatment of Children,
O. TANGEN, *Oslo Norway*

Paternal Authoritarianism and Abused Children,
O. VALTUENA BORQUE, *Madrid Spain*

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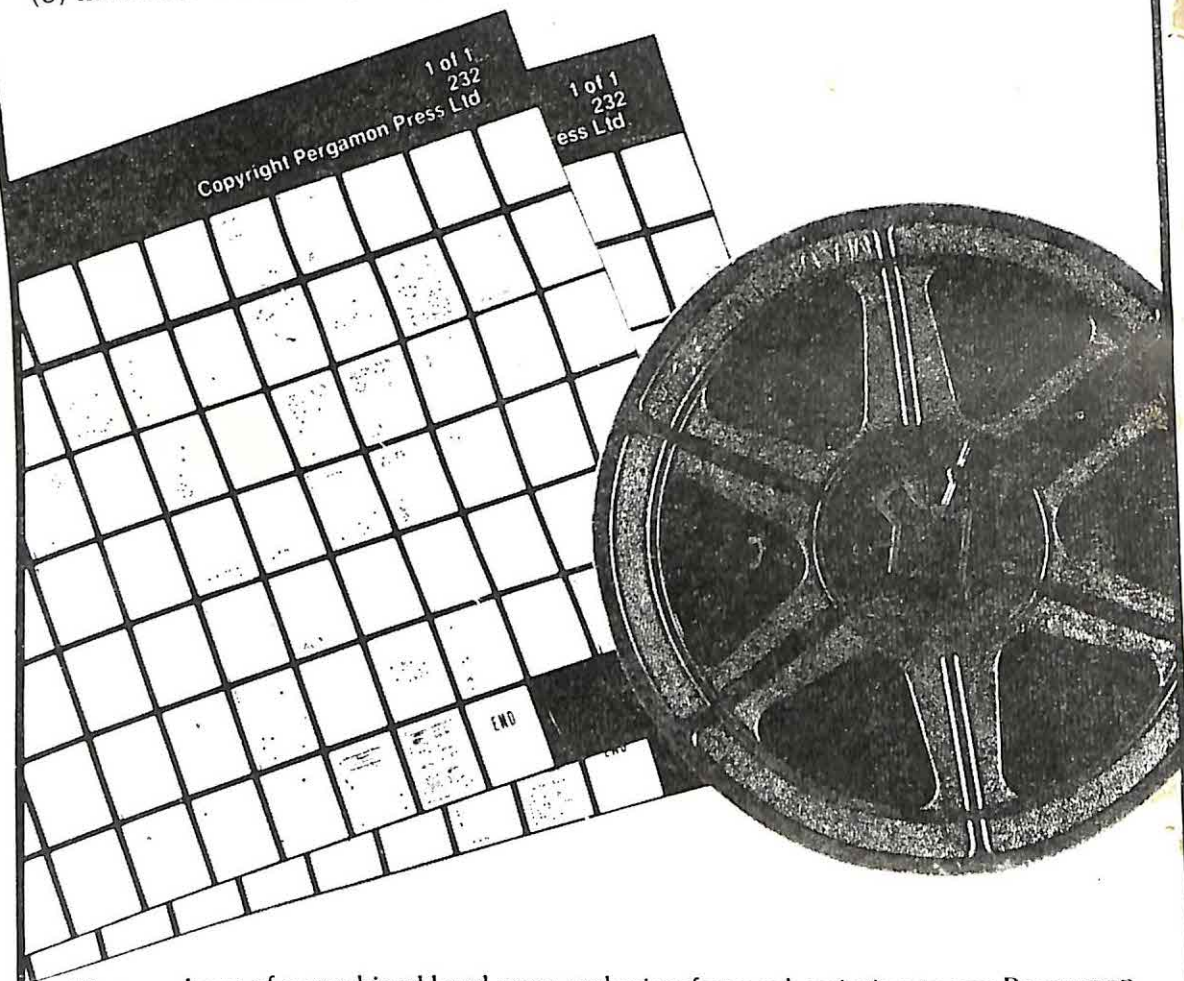
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family therapy, child patient,
brief focal therapy, clinical

VIM, ARNON and KINSTON, WARREN (1978) Brief focal family therapy when the
s the referred patient—I. Clinical. *J. Child Psychol. Psychiat.* **19**, 1–12.

Summary—The development of a method to carry out time-limited focused work
families is briefly described. Two case examples are provided to demonstrate the
of formulation of dynamic hypotheses, the development of operational plans for
sts, and the changes in the family with therapy. The value of the method and the
ance of the workshop where it is being fostered and documented is discussed.

malnourishment, intelligence,
Nigeria, McCarthy Scale

ASHEM, BEATRICE and JANES, MARGARET D. (1978) Deleterious effects of ch
nutrition on cognitive abilities. *J. Child Psychol. Psychiat.* **19**, 23–31.

Summary—The McCarthy Scale of Abilities was administered to 11
children between the ages of 2½ and 6 yr who came from “well-to-do” urban
urban and rural environments. The “poor” groups were sub-divided into th
ably Nourished” and the “Malnourished” on the basis of their physical gro
The “well-to-do” group served as the “Well-Nourished” control. The “Well-
group scored significantly higher than the “Reasonably Nourished”, the
nificantly higher than the “Malnourished”, on the G.C.I. and all sub-scales
that future remedial measures should try to improve hygiene, sanitation and
stimulation as well as nutrition in “poor” groups.

stimulant effects, interaction,
hyperactive children, mothers

HRIES, THOMAS, KINSBOURNE, MARCEL and SWANSON, JAMES (1978) Stimulant
s on cooperation and social interaction between hyperactive children and their
ers. *J. Child Psychol. Psychiat.* **19**, 13–22.

Summary—Twenty-six hyperactive children and their mothers collaborated on a
our tracking task with acute administration of stimulant (methylphenidate) and
bo in a double-blind design. The dyad performed significantly better when the
was in the medicated state. Aspects of the quality and quantity of interaction
een mother and child were noted. In the medicated state, the child directed the
ner more and in a more positive fashion, while the mother behaved in a less con-
ing way and also more positively. We conclude that in the medicated state, a more
rable interaction is established, permitting less constrained learning on the part of
child. The findings make it unlikely that the controlling behavior of mothers of
children act

families, parental attitudes,
family assessment, child psychiatry

CHURVEN, P. G. (1978) Families: parental attitudes to family assessment
psychiatry setting. *J. Child Psychol. Psychiat.* **19**, 33–41.

Summary—Although family assessment is widely regarded as an importa
child psychiatry practice, psychiatrists often doubt parents' readiness to part
attitudinal and behavioural data in this study suggest that the majority of
participate in family assessment if specifically invited. Most of those who f
clinic may cooperate in their home setting, out of working hours.

measures of sex-role identity,
cross-cultural, pre-school children

SH, LORELEI R. and GOLDBERG, WENDY A. (1978) The intercorrelation of measures of sex-role identity. *J. Child Psychol. Psychiat.* **19**, 43-48.

Summary—To examine the consistency of their sex-role identification, 122 preschool children were given seven measures which are frequently used to evaluate this dimension of personality. The degree of sex-typing of the children on any one measure was not significantly related to the degree of sex-typing demonstrated on any other measure. The implications of this finding for methodology in sex-role research are discussed.

speech delay/language, twins,
deprivation, intelligence

DUGLAS, J. E. and SUTTON, A. (1978) The development of speech and mental processes in a pair of twins: a case study. *J. Child Psychol. Psychiat.* **19**, 49-56.

Summary—Severely speech delayed twin girls were separated into parallel classes and given language training with the aim of remediating the effects of their early deprivation. The acceleration in their linguistic ability was paralleled by marked increase in intellectual functioning as measured by standardized psychometric tests. The relationship between language training and intellectual development is discussed, together with the importance of a structured language training programme with an adult in an interactive teaching situation.

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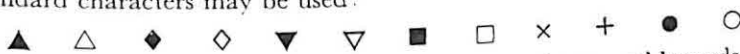
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Examples:

SEARS, R. R., WHITING, J. W. W., NOWLES, V. and SEARS, P. S. (1953) Some child-rearing antecedents of aggression and dependency in young children. *Genet. Psychol. Monogr.* **47**, 135-234.

PIAGET, J. (1953) *The Origins of Intelligence in Children* (Translated by Cook, M.), Routledge & Kegan Paul, London.

5. Nomenclature: Owing to the international character of the journal, no rigid rules will be observed. Each paper should be consistent within itself as to nomenclature, symbols and units.

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Official Organ of the Association for Child Psychology and Psychiatry

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Epidemiological Approaches in Child Psychiatry

edited by P. J. Graham

December 1977, x+402pp., £10.00/\$19.50 0.12.294550.6

The papers contained in this volume — originally presented at a meeting held at the Ciba Foundation attended by workers from many different countries — provide an up-to-date account of work currently being undertaken in the epidemiology of child psychiatry. Behaviour and emotional problems are so prevalent that they form a major contribution to the total number of handicapping disorders in children. An understanding to how they occur, how common they are and what the best methods are for delivering services is an essential part of any comprehensive health care system. This book provides information not only for those working in the research field but also for those psychiatrists, psychologists, social workers and health planners who wish to inform themselves of the latest developments. The work includes an account of recent and otherwise unpublished findings in relation to urban/rural differences in rates of disorder, strategies for prevention, as well as ethological studies looking at the ways in which the mothers with different earlier experiences handle their children.

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Publication Quarterly, from March 1978

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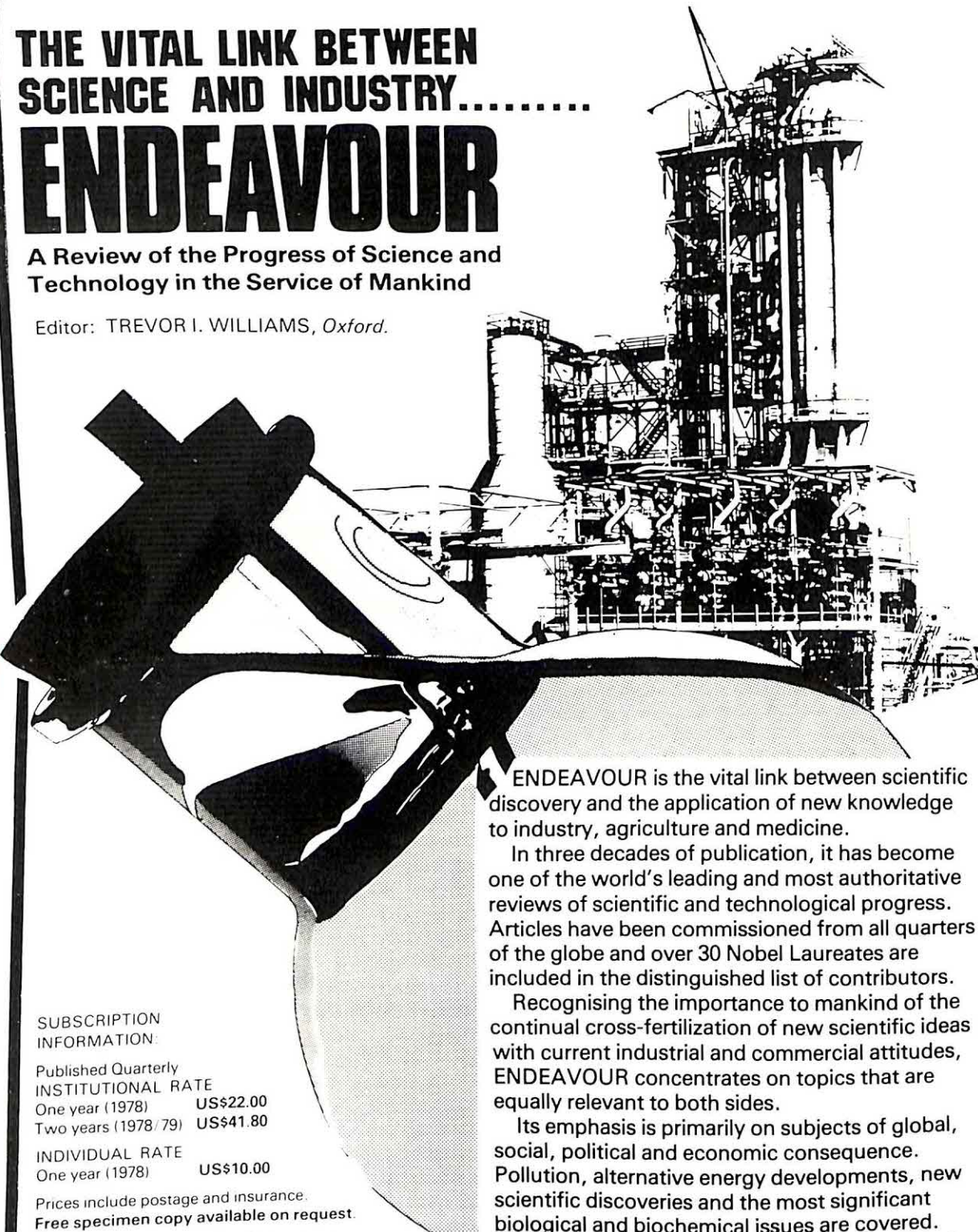
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OBITUARY

RONALD MACKEITH 1908-1977

DR. RONALD MACKEITH, an ardent supporter of the Association for Child Psychology and Psychiatry from its foundation, died on October 30th 1977, aged 69 years. He was working, some say even at his best, up to the night of his death and this capacity for sustained hard work was the hallmark of a distinguished academic and professional life.

The son of a general practitioner in Southampton he was one of eleven children with a twin sister. Educated at King Edward VIth School, Southampton, and Honorary Scholar to Queen's College, Oxford, he trained at St. Mary's Hospital Medical School, London. In 1948 he was appointed Children's Physician to Guy's Hospital, held many honorary appointments to other hospitals, became first Director of the Newcomen Centre, was awarded the James Spence Medal and many other distinctions from Universities and Academies in the U.S.A. and Europe.

After World War II a number of young doctors, whose career in paediatrics had been interrupted, were given opportunities for further training at the Hospital for Sick Children, Great Ormond Street, London, and Ronald MacKeith was among them. While most of us vied with each other for scientific prowess or to demonstrate the "good case", MacKeith stood apart as being more concerned with the child as a child and with general problems of childhood and their prevention, and displayed a knowledge of these that none of us had. He was more mature in thought. This we knew and it reconciled us to his being chosen for the staff appointment at Guy's Hospital to which some of us had also aspired. This lead in maturity he never lost and, in his own field at least, he remained the wisest of his contemporaries up to his death.

Ronald MacKeith was a member of the original committee of our Association (1957) and was its Chairman for the two years 1961 and 1962, following Dr. Emmanuel Miller, the founder, Dr. Kenneth Soddy and Dr. John Bowlby. The election of a paediatrician to this office marked the importance of the three disciplines, child psychology, child psychiatry and the general medicine of childhood, to one another; it was a wise choice. He was in his fifties, a children's physician of thirteen years standing at a great teaching hospital, with a national and international reputation as a leader of thought and action in the field of cerebral palsy and the new discipline of child neurology and developmental medicine. He also had a lifelong interest in psychosomatic manifestations in childhood. And he had many friends and colleagues who were psychiatrists.

One of the long term aims of the Association was to increase the status and prestige of child psychology and psychiatry, with the eventual establishment of university departments. With his enormous number of contacts and his own growing status he certainly helped to do that. In the first three years of his membership he was one of a subcommittee on preventive psychiatry and it was his first duty, when he became chairman of the Association, to introduce Dr. Emmanuel Miller as lecturer on "The

Possibility of Preventive Psychiatry; with Special Reference to Primary Prevention". MacKeith spent his life thinking about the prevention of ills and the programmes of his two years were biased accordingly. He obtained the full support of the Association in drawing the attention of the Nuffield Foundation Scheme for Assisting Post Graduate Medical Education to the need for the teaching of "Child Development", one of the keys to prevention.

Ronald MacKeith was profoundly affected by the picture of a childhood gone wrong, a child blighted as a foetus, a brain with normal endowment damaged at birth or by an accident later and the distress and emotional confusion in parents that complicated the loss of normal potential in a child. It is a field paediatricians had formerly tended to leave to others working in comparatively narrow specialties. It was his life's work to be a "purveyor" or distributor of appropriate knowledge gained in many narrow fields of expertise, to which he added his own thought on the practical application, to all those who have responsibility for a handicapped child. "What is known", he said repeatedly "needs to be more widely known". But this can only be achieved by long, continued effort.

In 1948 he opened the Cerebral Palsy Advice Centre at Guy's Hospital, which later became the Newcomen Centre. He had brilliant and devoted colleagues there and it has been a workshop where many ideas have originated and new methods have been tested and made available to practitioners of developmental assessment, screening and prevention of handicaps; "front-line people" as he called them. With what pleasure and pride he gave the citation for his colleague Dr. Mary Sheridan on her receiving the James Spence Medal; an honour which he himself received soon after. It is given for outstanding contributions to the advancement or clarification of paediatric knowledge.

In 1958 began the first of the International Study Groups in Child Neurology which ran biennially to 1976, ten in all, at St. Edmund Hall, Oxford. The thoroughness of the preparation and the reputation and erudition of the contributors ensured their immense success from the first to the last. A prodigious amount of old and new knowledge and new theory was here reviewed and permanently recorded; much of it in published form. This was indeed making what is known more widely known. The meetings achieved world renown and tributes and thanks poured in. "Le souvenir de notre merveilleuse semaine d'Oxford ne s'émousse pas" (does not lose its sharpness, its edge). Those who have kept the fat dossiers and conference photographs of those Oxford meetings can only review them with nostalgia and renewed sadness at the loss of Ronnie.

Although Ronald MacKeith's achievements are multiple and can be summed up as a general influence, one can be singled out as of extraordinary importance—*The Journal of Developmental Medicine and Child Neurology*. It began in 1958 as the *Cerebral Palsy Bulletin*, with E. Clayton Jones as general editor and R. MacKeith as medical editor, a task he undertook for the next 10 years. No. 1 is a thin publication of only 36 pages, price 2/6, devoted to Dr. W. J. Little. However, the list of titled patrons, prestigious churchmen and high-ranking advisory or research consultant supporting this enterprise of the National Spastics Society shows that it was considered to have a considerable potential for growth: and as years went by, under its very able joint editorships, with MacKeith becoming senior editor in 1970, it has

developed into a journal of 1000 pages a year, receiving contributions from all nations, with a world circulation, indispensable to the paediatrician and child psychologist or psychiatrist. It is supremely well produced. He demanded a high standard of authorship. And here it may be mentioned that he admired the editorship of the *Journal of Child Psychology and Psychiatry*, the distinction of the journal, its reputation and its earnings. He was a member of the Editorial Board from its inception.

Ronnie MacKeith as a writer himself was prolific, not in production of books, all of which he wrote jointly, but of articles, which were short and therefore read, and editorials, prefaces, introductions, reviews. He wrote frequently and very helpfully on the vexatious complaint of bedwetting. "When a child is brought with the symptom of bed wetting the doctor disliking simple words calls it enuresis and then drifts into thinking there is a disease, 'enuresis'." He himself was a wonderful exponent of the power of plain words.

His editorials were short, wise, simple, helpful and lit with a wry humour. Coming frequently from his pen for the last 25 years they must have had great influence. Their titles give us his philosophy, his principles, values and way of teaching, e.g. "Every Hospital a Teaching Hospital"; "Is Infant Welfare and School Clinic Work Intellectually Respectable?"; "Obstetricians please help"; "Restoration of Parents as the Keystone of the Therapeutic Arch"; "Or is a Children's Physician Just Naturally Nice"; and "Save a Baby". And in them he said such things as, "In some medical out-patient clinics it is the rule that if a patient misses two appointments his name is taken off the list. This is a poor way of looking after sick people". "Are Large Congresses Worth the Money?" (small residential groups he said are of much more value if it's knowledge you want and knowledge your financial sponsors want you to have). "The Nurse who looks after the woman who has just had a baby will have much to do . . . she will put the baby naked on the mother's chest, etc."; "It is a curious thing that no one seems to consider it important to ensure that the doctors in Local Authority Service are offered a mystique of preventive (as opposed to therapeutic) medicine"; "A fly fisherman (the respectable intellectual) would find the Thames at Hammersmith extremely dull: it would present a very complicated and difficult challenge to someone anxious to prevent chemical pollution"; "It is a good thing to be more upset by children's crying than are most of our colleagues".

The Spastics Society in their long crusade for better care of handicapped children and prevention of handicaps have lost a great leader. He was not a research worker nor a specialist in any narrow field, nor is his name attached to a disease or syndrome, but there is a MacKeith's sign and it is a pretty one: the elucidation of automatic stepping (which normally disappears after about 5 weeks) in a baby up to the age of 8 months if the neck is extended.

As a speaker he could not be described as eloquent in the ordinary sense, nor even fluent, but when he got up to speak everybody waited for those carefully weighed words, in the slightly booming voice and the often difficult idea he would formulate or reformulate after rejecting his first choice of phrase. Without what is called eloquence, on questions of humanity in medicine, especially, he yet moved his audience. He liked speaking French or at any rate to say some things in French. He

could be said to have had a "French period". It was soon after the war, André Thomas in his eighties had opened the eyes of paediatricians to the patterned behaviour of the newborn infant. It was fascinating. MacKeith was a leader among the enthusiasts who went over to Paris to associate with André Thomas' followers, A. Minkowski and Mme. Sainte Anne Dargassies and with them Cyrille Koupernik, Professor Robert Debré and Nathalie Masse. He loved France, the French language and the French paediatricians and they loved him. For many years he had invitations to speak at the Centre International de l'Enfance under Professor Debré. He was a Membre Correspondant de la Société des Pédiatres de Paris.

Concerning Ronald MacKeith's nature and influence, two more of his activities may be mentioned. Firstly the travelling club he belonged to, which has over the years visited other paediatricians abroad to see how they work; in Norway, Holland, Belgium, France, Italy, Germany, Switzerland and Scotland; visits on which, happily, Elizabeth was able to accompany him. And secondly the paediatricians' discussion group at Miss Anna Freud's house. He was one of the first of its privileged members. It is still meeting after 21 years. The influence was that of Anna Freud of course, but who better could convey it than he?

Concerning his nature, which was a reason for the influence he had, just as much as his intelligence and tremendous work stamina—people are impressed by a man who, while being thoroughly practical about a problem (cerebral palsy) is also moved by it. It is said of George Frederick Still that even after a lifetime at the bedside of sick children, his emotion became very noticeable whenever the child's life appeared to be threatened. Such a man also was Ronald MacKeith who never ceased to be distressed by the tragedy of severe handicap. A man who has this side to his nature, while being also very objective about things, has more effect on people than others, as he works.

Ronnie's anger, which everyone witnessed occasionally, was probably more upsetting to him than the person whom he suddenly berated for a mistaken point of view, as he thought. It was not directed personally and never caused that kind of embarrassment in an audience. The meeting was simply shaken up, often rather enjoyably, and as it proceeded after the galvanic shock the recipient of the anger picked himself up, shook off the dust, usually contributed further to the discussion and was afterwards to be seen talking with Dr. MacKeith as good friends.

He was very kind, everyone agrees; but what is meant by that? And how did he show so much kindness? One answer is perhaps to be found in his short synopsis or guide to the Feelings and Behaviour of the Parents of Handicapped Children. This understanding came from suffering together (i.e. sym-path^y) with the parents. With such knowledge a little said can be helpful, sometimes very helpful. So he could be very kind, very often. But above all when their guilt or grief or anger came out he did not shy away from it; nor did he ever insulate himself from the emotions and expressions of suffering that doctors frequently encounter.

He was also very affectionate. He ended his letters to many people "love Ronnie". It is said that he once wryly hinted that it might also be taken as an injunction. A needless one for he was loved by countless friends. But whenever he received an open demonstration of our affection and admiration his face lit up with a wonderful expression of happiness.

DERMOD MACCARTHY

THE EFFECT OF EARLY INSTITUTIONAL REARING ON THE DEVELOPMENT OF EIGHT YEAR OLD CHILDREN

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INTRODUCTION

THIRTY years ago Goldfarb (1945) described grave and persistent cognitive and affective defects in children whose first years were spent in institutions, even when they were later reared in private families. Most institutions in the West have enormously improved since then but they still fail to offer children growing up in them the warm, intimate and continuous relationship with a mother-substitute regarded by Bowlby (1951) as a necessary condition for healthy development. From the point of view of social policy it is important to know whether this method of early rearing produces lasting and undesirable effects. For psychologists, the development of children transferred from such institutions to private families throws valuable light on the general issue of the extent to which early experiences determine later behaviour.

Earlier studies have described the development of a group of 65 children whose first years had been spent in residential nurseries (Tizard and Rees, 1974; Tizard and Rees, 1975). These were all the $4\frac{1}{2}$ year old children in the care of three voluntary societies who fulfilled the following criteria; healthy full-term babies, admitted before the age of 4 months and continuously institutionalized until at least the age of 2. Between the ages of 2 and 4, 24 of the children had been adopted, and 15 had been restored to their natural parents, whilst 26 remained in institutional care.

The institutions were in many ways of high quality—the staff-child ratio was generous, and toys and books were plentiful. However, close personal relationships between adults and children were discouraged, and the care of the children had passed through many hands—on an average 24 different nurses had worked with the children for at least a week in their first 2 years of life, and by the time the children were $4\frac{1}{2}$, the figure had increased to 50.

At $4\frac{1}{2}$, the institutional and restored children were reported to have no more behaviour problems than a comparison group of London home-reared children, whilst the adopted children were said to have fewer behaviour problems. Most of the adopted children were said to have formed close attachments to their new parents. However, a minority of both institutional and ex-institutional children were said to be markedly attention-seeking, "over-friendly" to strangers, and indiscriminately affectionate. The majority of the institutional children were described

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as either uninterested in adults, or inclined to attach themselves to anyone who took an interest in them.

Twenty-six of the children had been assessed at the age of 2 whilst still in institutions. At this age, their language development had been somewhat retarded (Tizard and Joseph, 1970). By the age of $4\frac{1}{2}$ the mean WPPSI I.Q. of the institutional children was 105, and children adopted from these institutions at an average age of 3 years had a significantly higher mean I.Q. of 115. This difference did not appear to reflect selective placement by I.Q., or heredity. The I.Q.s at two of the children subsequently adopted were no higher than those of the remaining children, and the occupations and education of their biological parents were if anything inferior. Most of the adopted children, had, indeed, been "adoption rejects", in the sense that they had not been offered for adoption in infancy because of a family history of epilepsy or mental illness, or because they were of mixed race. Nor did the higher I.Q.s of the adopted children represent simply a response to removal from the institutional environment—children restored to their natural mothers, who were predominantly working-class, had a slightly lower mean I.Q. (100) than the institutional children. There was no difference between the I.Q.s of the white and non-white children in any of these settings (Tizard and Rees, 1974).

The significance of these findings for the future development of the children could hardly be assessed with confidence at the age of 4. But because marked changes had already occurred in the adopted children, it seemed reasonable to expect that the "normalization" process would continue and the cognitive improvement would be sustained. The development of the institutional children was more in doubt. If, as seemed likely, an important factor in their personality development was the large number of staff changes, then one would expect an increasing deviance in their behaviour. Children who left the institutions, however, might be expected to "normalize", unless, indeed, Bowlby (1951) was correct in arguing that mothering is useless if provided after the first 2 or 3 years of life.

We therefore decided to revisit the children after they had reached the age of 8: by this age we would also be able to avail ourselves of evidence from their teachers, and discover how the children coped with their peers, other adults, and the learning demands of the school.

WHEREABOUTS OF THE CHILDREN AT 8 YEARS

By the age of 8, only eight of the 65 children remained in institutional care, and one of these had had a period in a foster home. Of the other children who had been in institutions at $4\frac{1}{2}$, seven had since been adopted, four were in foster homes and seven had been restored to their natural parents. We were able to interview only 51 of the 65 children whom we had interviewed at the age of 4; eight parents refused permission, and six had emigrated. Table 4 shows the placement of the remaining children. The mean WPPSI I.Q. at $4\frac{1}{2}$ of the 14 children whom we were unable to test at 8 was 109, S.D. 9.4: this was not significantly different from the mean of 107, S.D. 12.8, of the remaining children nor were there any significant differences within the different groups. Only 18 of the 51 children were girls. This is because fewer girls than boys spend their first 2 years in institutional care.

Reasons for placement at 8 years

Table 4 shows that there was no evidence that the children's I.Q.s at 4½ determined whether or not they were subsequently adopted. The mean WPPSI I.Q. at 4½ of the children who remained in the institutions was not significantly different from that of the children who left the institutions after the age of 4½. However, the children fostered or adopted into manual homes after the age of 4½ tended to have had lower I.Q.s at 4 than children placed in non-manual homes (Table 5).

The major factors determining whether a child was fostered or adopted were the mothers' wishes and the child's skin colour. The children who remained in institutions were those whose mothers would neither release them for adoption nor reclaim them, or black children for whom no adoptive homes had been found. Only two of the seven children who had never left the institution by 8 were white.

Parents of later adopted and restored children

As was the case with the couples who adopted 2-4 year olds, the couples who adopted the older children were older and of higher social class than the natural parents who reclaimed them. They were middle-aged childless couples who either felt too old to undertake the care of an infant, or who were considered too old to do so by the adoption agencies. The mean age of the adoptive mothers of the older children at the time of the child's birth was 37.6 years, compared with a mean of 21.5 years for the natural mothers of the restored children. All the adoptive couples and all but one of the parents who reclaimed their children were white. Two of the five adoptive fathers of the older children were in professional occupations (social class 1), one was a clerk, and two were skilled manual workers. All the step-fathers of the restored children were manual workers.

Comparison groups. When the children were 2 and 4½ we compared their development with that of a group of 30 London home-reared working-class children. This seemed an appropriate comparison, since most of the study children had been born to working-class mothers; all but one family, who had emigrated, agreed to be re-interviewed. However, because 17 of the 25 adoptive fathers were non-manual workers, we decided to interview as well a group of 20 middle-class mothers of 8 year olds in two local schools. Only one mother whom we approached declined to be interviewed. These mothers were in no sense a proper sample, and this group was not included in the main statistical analysis, but we hoped that their answers would give us some indication of whether behavioural differences between adoptive and London working-class children were due to social class or adoptive status. Lack of resources made it impossible to test these children or carry out a full assessment of them.

Size of family. The mean number of children per family (excluding children aged 18 or older) was 1.9 in the case of all adopted children, 2.7 in the case of all restored, and 2.1 in the case of the London comparison group ($F = 3.7$, $P < 0.05$).

Institutional staffing at eight. The institutional children were no longer living in residential nurseries, but in all-age homes containing from 6 to 19 children. One child was in a special unit for disturbed children. Because the homes contained very few, if any, children under school-age the staff ratio was less favourable than

in the nurseries, ranging from one child care worker to two children in the case of the special unit to 1:3 or 1:4 elsewhere.

It was not always possible to discover how many staff had worked with the child since he was 4½. In the case of four children, five, six, 15 and 17 staff had worked with the children for at least a week in the past 3½ years. This meant that a total of 11, 39, 58 and 80 staff, respectively, had worked with these four children for at least a week since they had entered institutional care in infancy. In the case of the other three children, high staff turnover and the reorganization of the nursery into all-age homes meant that not only were there no records such as a staff book available, but that none of the present staff had been there long enough to be able even to give an estimate. The numbers must, however, have been very high, and the total number of staff who had cared for these children since infancy was probably around 80. Four of the institutional children were visited by relations about once in 3 months, the others had not been visited for several years.

ASSESSMENT PROCEDURE

All the interviews were carried out by one of the authors (J.H.) and with the permission of the mother, tape-recorded. Several hours were spent by the interviewer in each home or institution. During this time the WISC I.Q. (Wechsler, 1949) and Neale reading tests (Neale, 1966) were given to the child, ratings were made during testing, and the mother, or housemother, was interviewed.

Ratings of child's observed behaviour. Seven rating scales were used to rate the child's behaviour during testing. These scales included five used in our 4 year old assessment, for co-operativeness, restlessness, concentration, talkativeness and friendliness (Tizard and Rees, 1974) and two for anxiety and disinhibition, developed by Rutter and Graham (1968). Each point on the scale was anchored to specific activities, e.g. the rating for co-operativeness depended on the number of times the child refused or had to be coaxed to do a test item.

The correlation between the ratings of two investigators who assessed a pilot sample of 20 children during shortened WISC testing was $r = 0.81$ for co-operativeness, 0.87 for restlessness, 0.64 for concentration, 0.87 for anxiety, and 0.82 for friendliness. There were no disagreements on the ratings of talkativeness and disinhibition.

Evidence from the parents

Behaviour problems. The child's mother, or the housemother most familiar with him, was interviewed using questions based on those in the Rutter Parent Questionnaire (Rutter *et al.*, 1970). The questions covered the following areas: complaints of headaches and stomach-aches; control of bladder and bowels; appetite; food fads; sleeping difficulties; restless and fidgety behaviour; concentration; impulsiveness; thumb-sucking, nail-biting, stammering and nervous tics and habits; stealing and truanting; fears, worries and unhappiness; irritability and tantrums; over-fussiness and rituals; disobedience. In addition, detailed questions were asked about the child's relationships with other children, with sibs, and with strange adults.

The mother was asked to describe the child's behaviour in each area, with supplementary questions where necessary, and on the basis of her replies the interviewer rated each of the 36 areas on a three-point scale according to the frequency and severity of symptoms. A sample of 10 tape-recorded interviews were re-rated by the senior author. Disagreements, which did not amount to 1 per cent, were resolved by discussion. "Blind" ratings of tape-recordings were not possible because incidental remarks, the mother's accent, etc., usually made it clear to which group the child belonged.

Clinic referrals. We asked whether the child had ever been referred to a doctor or a clinic for a behaviour problem.

Affectional bonds. The mother or housemother was asked a series of questions designed to elicit whether the child was particularly attached to, or affectionate towards, or clinging to, any particular adults; these questions related to whether the child wanted a particular adult at bed-time, or if he was ill; whether he objected or was upset if parents or housemother went away for the evening or for a few days; the extent to which the child wanted to be with, or followed, particular adults, and to whom he showed affection. We also asked whether the mother believed that the child was closely attached to her, how he got on with his father, and whether she herself felt deeply for the child.

Joint activities. We asked whether and how often the parents played with the child, or read to him, went shopping or on other expeditions with him, helped him with schoolwork, or let him help them around the house or garden.

Reports from teachers. We showed the mother or housemother a copy of a questionnaire, consisting of the Rutter "B" scale for teachers (Rutter *et al.*, 1970) together with some supplementary questions, and asked her for permission to send the questionnaire to her child's school. It was stressed that no mention would be made of adoption or institutions in the accompanying letter, but that the questionnaires would be presented as part of a longitudinal study of child development. Two adoptive parents refused permission and the teachers of two London children did not return the forms. We asked each teacher to complete a second questionnaire for the same sex classmate nearest in age to the study child. A comparison group was thus formed for each group of children, in addition to the London comparison group.

RESULTS 1. SOCIAL AND EMOTIONAL DEVELOPMENT

The main comparisons have been made between all adopted children ($n = 25$), all restored children ($n = 13$), children who had been continuously in institutions since infancy ($n = 7$) and the London comparison group ($n = 29$). Children with multiple placements are not included in these groups: since only three fostered children had not had multiple placements data on them are not presented. Because the numbers in each group are small, separate analyses of boys' and girls' behaviour have not been made.

Ratings of observed behaviour. At 4, both adopted and restored children had been rated as significantly more friendly and more talkative than the other children, and the restored children had been significantly more attention-seeking. By 8, the differences were much reduced. Significant differences between the groups remained on

ratings for co-operativeness, anxiety, friendliness, and attention-seeking, but they were mainly due to the behaviour of two extremely anxious and hostile institutional children, and to a tendency for the restored children to be more friendly, "over-friendly" and attention-seeking than the other children.

Evidence from the parents

Behaviour problems. Each of the 36 "problem areas" were rated 0, 1 and 2 according to the frequency and severity of the child's problems. The mean "total" problem scores of the various groups ranged from 11.4 to 13.3 and were not significantly different. This remained true if "neurotic" and "anti-social" symptoms were looked at separately. Only six questions significantly differentiated the restored and adopted children from the London working-class children (Table 1). The parents of the

TABLE 1. BEHAVIOUR PROBLEMS REPORTED BY PARENTS OR HOUSEPARENTS

	Adopted (%) <i>N</i> = 25	Restored (%) <i>N</i> = 13	Institutional (%) <i>N</i> = 7	London comparisons <i>N</i> = 29	χ^2	d.f.	<i>P</i>
"Nervous" stomach aches	12	46	0	21	13.3	6	0.04
Stutters	4	23	0	0	12.3	6	0.05
Nervous habits	8	58	14	7	19.8	6	0.003
"Over-friendly"	32	46	14	10	7.6	3	0.05
Poor sib relationships	36	69	17	44	21.2	9	0.01
"Not very sensible"	40	17	29	0	20.1	9	0.02

restored children more often reported "nervous" stomach aches, "nervous" habits, e.g. picking and scratching, and stuttering. Both restored and adopted children were more often than other children described as "over-friendly", and restored mothers more often reported very bad sibling relationships than did other mothers. More mothers of adopted children than of restored or London working-class children described their children as "not sensible enough to leave on their own". This characteristic, however, appeared to be related to social class; just as many middle-class comparison children were judged "not sensible" by their mothers.

Referrals to doctor or clinic. Sixty-two per cent of the restored children, compared with 21 per cent of the London working-class children, 5 per cent of the middle-class comparison children, 8 per cent of the adopted children and 29 per cent of the institutional children had been taken to their general practitioner or a Child Guidance Clinic because of behaviour problems ($\chi^2 = 17.8$, d.f. 4, $P < 0.01$). This finding does not appear to accord with the lack of significant mean differences in the problem scores reported by the various parent groups. However, half of the restored children had been referred to clinics by their teachers, not their parents, because of behavioural problems at school.

Affectional bonds. In answer to a direct question the great majority of adoptive and London mothers (84 and 90 per cent, respectively) said that they felt that their child was closely attached to them, but this was true of only 54 per cent of the mothers of the restored children and 43 per cent of housemothers of institutional children ($\chi^2 = 14.9$, d.f. 6, $P < 0.025$).

It was equally true that a much larger proportion of adoptive than restored

mothers felt closely attached to their child. Three of the 25 adoptive mothers made it clear that they were dissatisfied with the adoption, and that they had little positive feeling for the adopted child. A fourth mother did not express herself in these terms, but nevertheless almost all the remarks she made about her child were critical or disparaging. However, a majority of the natural mothers of the restored children—eight out of 13—said that they did not feel deeply for him, and did not love him as much as their other children. If we had been able to interview all these mothers the proportion might well have been larger since three of the natural mothers who had expressed definite dislike of their child when he was 4 had meanwhile emigrated, in one case, or given up his care, in two cases. Further, of the eight restored children who had acquired a step-father, only three were said to be on good terms with him, compared with 19 out of 25 adopted children.

Very few children in any group tended to follow their mothers around, or protest if she went out at night, and very few appeared to be clinging. However, both the adopted and institutional children were unusually affectionate; 48 per cent of adopted children and 43 per cent of institutional children often wanted a cuddle, compared with 17 per cent of London children and 8 per cent of restored children. Restored children were in fact, the least cuddly group, 54 per cent of them never wanted a cuddle, compared with 28 per cent of London children, 16 per cent of adopted children, and 14 per cent of institutional children ($\chi^2 = 13.4$, *d.f.* 6, $P < 0.04$). At the age of 4 some institutional and ex-institutional children had been indiscriminately affectionate, and had allowed strangers to put them to bed and comfort them if they were hurt. By 8, indiscriminately affectionate behaviour was very rare, but institutional and ex-institutional children were still more likely than London children to allow a stranger to put them to bed, whilst London children were more likely to try to insist that one of their parents put them to bed ($\chi^2 26.4$, *d.f.* 9, $P < 0.002$).

Changes in affectional relationships of children who left the institution after the age of 4½

Marked changes had occurred in the affectional behaviour of the children who had left the institution since our last visit.

Of the nine children adopted or restored to their natural parents after the age of 4½, three had been described as very affectionate and closely attached to their nurse when they were 4½. None of these three children were thought by their parents at 8 to be either affectionate or attached to them. But of the six children whom the nurses had not considered closely attached to anyone, five were said to be closely attached to their mothers at 8. Two children who had not been considered at all affectionate when in the nursery were now considered to be so: the other children were considered affectionate on both occasions.

Joint activities. The adoptive parents were much more likely to play with their children than the other groups of parents. Ninety per cent played with their child sometime during the week, compared with 72 per cent of parents of London children, 65 per cent of middle-class "control" parents, 46 per cent of parents of restored children, and 57 per cent of houseparents ($\chi^2 = 13.3$, *d.f.* 6, $P < 0.04$). They were also more likely to help their children with schoolwork, and engage them in joint household activities, but these differences were not significant. Reading aloud no

longer differentiated the parent groups; a minority of all parents read to their children; in the case of the adopted children, this was because many now preferred to read to themselves.

Evidence from teachers: Rutter 'B' scale. A score of nine or more on this questionnaire is usually taken as a cut-off point for psychiatric screening (Rutter *et al.*, 1970).

Table 2 shows that all the institutional and ex-institutional groups, but none of the comparison groups, including the London working-class group, had mean scores of over nine.

TABLE 2. RUTTER *et al.* (1970) 'TEACHERS' SCALE PROBLEM SCORES FOR DIFFERENT GROUPS OF CHILDREN

Group	Total problem score			"Neurotic" items		"Anti-social" items	
	N	Mean	S.D.	Mean	S.D.	Mean	S.D.
London comparisons	27	5.4	5.4	1.7	2.1	0.9	1.6
Their classmates	27	4.1	5.5	1.3	1.7	0.5	1.2
All adopted	23	10.0	7.8	1.4	1.7	2.5	3.1
Their classmates	23	3.5	3.6	1.5	1.7	0.3	0.6
All restored	13	13.7	7.2	1.8	2.2	3.8	2.5
Their classmates	13	3.1	3.7	0.9	1.4	0.5	1.1
Institutional	7	9.9	9.8	1.4	1.1	2.4	2.4
Their classmates	7	4.1	4.5	2.1	2.3	0	0

Differences between the institutional and ex-institutional groups and their comparison groups on both the total problem score and the anti-social items of the scale were large and significant. The groups were not significantly differentiated by the neurotic items. The institutional and ex-institutional groups also differed significantly from the London working-class group on the total problem score ($F = 5.1$, $P < 0.003$) and the anti-social scale ($F = 4.7$, $P < 0.005$) but not on the neurotic scale.

Table 3 lists the specific items on the Rutter 'B' scale which significantly differentiated the ex-institutional children from their classmate comparisons.

The items fall into three groups—restless behaviour; poor peer relationships, and disciplinary problems. Of course, all the adopted and restored children were not described in these terms. The behaviour listed in the table was said to be "somewhat" or "certainly" true of between 48 and 61 per cent of adopted children, depending on the item, and between 54 and 77 per cent of restored children.

Attention-seeking behaviour in the classroom. We asked all the teachers two additional items about attention-seeking behaviour, which were not included in the Rutter Scale: did the child try more than most children to get attention from strangers entering the classroom, and did he try more than most children to get a lot of attention from his teacher. Both the institutional and ex-institutional groups were more often described as attention-seeking than the London children. Fifty-two per cent of adopted children, 69 per cent of restored children and 43 per cent of institutional children were said to seek attention from a stranger, compared with only 7 per cent of London children (Table 3).

Almost identical proportions were said to seek attention from the teacher more often than other children.

Both adopted and restored groups were also significantly more often described as seeking attention in these ways than their classmate comparisons, but this was not

TABLE 3. ITEMS ON TEACHERS' 'B' SCALE QUESTIONNAIRE ON WHICH ADOPTED AND RESTORED CHILDREN DIFFERED FROM CLASSMATE COMPARISONS

Somewhat or very true	% Adopted children so described (<i>N</i> = 23)	% Restored children so described (<i>N</i> = 13)	% London "controls" so described (<i>N</i> = 27)
Very restless	69*	77*	22
Squirmy, fidgety child	69**	62*	22
Often damages or destroys property	22	46*	20
Frequently fights or is quarrelsome	48*	46*	29
Not much liked by other children	44*	54**	30
Tends to be on own	52	69*	33
Irritable, touchy	57*	54*	22
Frequently sucks thumb or finger	26*	23*	4
Is often disobedient	48**	77**	15
Cannot settle to anything for long	48**	69**	26
Often tells lies	39*	69**	22
Resentful or aggressive when corrected	61**	62**	19
Seeks attention from strange adults	52**	69**	7
Seeks attention from teacher	45**	69**	15

*Significant beyond 0.05 level.

**Significant beyond 0.01 level.

true of London children or institutional children. We also asked teachers about the ways in which the children sought attention. The most common attention-seeking behaviour was not "naughtiness" but what the teachers saw as an excessive number of social approaches, —e.g. "He tells you unnecessary things just to get attention"; "Persistent conversation, usually about self, family and possessions"; "Tries to help when not asked".

Special characteristics of later adopted and restored children and of children with earlier fostering breakdowns

Most of the children in our study had left the institution between the ages of 2 and 4. However, five children had been placed for adoption at the ages of $4\frac{1}{2}$, 5, $5\frac{1}{4}$, 7 and $7\frac{1}{2}$ years, three children had been restored to their parents between the ages of $4\frac{1}{2}$ and 5 years, and one at 7 years. Three of these five later adopted children had very high Rutter teacher problem scores—16, 17 and 20 and very high parent problem scores, and two had very low teacher and parent problem scores. Three of the four late restored children had high Rutter teacher problem scores, 11, 14 and 19, and high parent problem scores, whilst one child had very low scores. Four of the five adoptive mothers of these children believed that the child was closely attached to her, but this was true of only one of the four natural mothers of the restored children. Four of the five adoptive mothers played with the child every day, but this was not true of any of the mothers of the restored children.

Five of the adopted children had been fostered elsewhere and returned to care before being placed for adoption, an experience often believed to cause lasting psychological damage. We were unable to visit one of these children when he was 8. Of the other four, all were said to be closely attached to their adoptive parents, and all the parents seemed to return their affection. Two were children with many

problems (Rutter teacher problem scores of 23 and 20), and three were considered "over-friendly" by their parents and attention-seeking by their teachers.

Relationship between variables

Teachers' and parents' complaints

For the whole group of 74 children on whom both sets of information were available the correlation between the child's total problem score as perceived by the parent and by the teacher was $+0.30$, $P < 0.001$. The relationship was low and not significant for the London and the restored children: for the adopted children it was $+0.69$, $n = 23$, $P < 0.001$. In general, agreements on individual items between adoptive mothers and teachers were higher than those between the other groups of mothers and teachers: on 10 items there was a negative relationship between the opinion of the mothers of the restored children and the teachers, but this was true in the case of only one item, "worrying", for adoptive mothers and teachers.

Ratings during testing and parent and teacher ratings

Few of the relationships between the ratings of the child's behaviour during testing and the teacher's or mother's description of the child's behaviour were significant. This was probably because most children behaved very "normally" during testing. The relationships were closest in the case of the institutional children, some of whom were difficult to test because of their hostility or anxiety.

Relationship between problems at 4½ and 8 years

Twenty-eight of the questions put to the parents when the children were 4½ and 8 were similar. The answers of the different groups of parents and nurses remained significantly the same for only six questions—sleep disturbances, sibling relationships, frequency of worries, demanding one or two particular people for comfort, friendliness and over-friendliness and tending to follow around after one or two particular people.

The correlation between the children's total problem score as reported by the parent at 4½ and 8 years was $+0.33$, $P < 0.01$ for all 79 children; for the separate groups, the correlation was only significant for the restored children (0.63 , $P < 0.05$) and the adopted children (0.39 , $P < 0.05$).

Problems at 8 in relation to earlier institutional reports

The children's case notes in the institution contained six-monthly reports on their progress. Whilst these were usually couched in neutral or positive terms, e.g. "A normal healthy child, developing satisfactorily", they sometimes included remarks which suggested that the child was a management problem, e.g. "very strong-willed, constantly looks for attention". The eight adopted children whose last report before leaving the nursery included such a comment had a significantly higher mean teacher problem score at age 8 (mean 18.5, S.D. 3.9) than the other adopted children (mean 7.0, S.D. 5.5, $t = 5.3$, $P < 0.001$). They also had a significantly higher parent problem score at 8 (mean 18.9, S.D. 6.3) than the other adopted children (mean 9.8, S.D. 5.6, $t = 3.7$, $P < 0.01$).

After placement in their new homes, the families had been visited by social workers. In 9 cases the social workers reported that the child was a management problem at that time, usually because of frequent tantrums. (Seven of these children also had unfavourable nursery reports.) The mean teacher problem score at 8 years of these nine children was 17.3 (S.D. 6.0) significantly higher than that of the other adopted children (mean 6.6, S.D. 5.0, $P < 0.001$). The mean parent problem score of these children was also significantly higher (mean 19.3, S.D. 5.8, compared with mean 8.9, S.D. 4.7, $P < 0.001$).

Age at leaving the institution in relation to other variables

The relationship between age at leaving the institution and Rutter teacher problem scores, parent problem scores, "over-friendliness", and whether or not the child was considered by the mother to be attached to her were all very small and not significant, except in the case of the restored children where there was a tendency for the later placed children to be less attached to their mothers (point-biserial correlation coefficient $r = 0.46$, $P < 0.056$).

Relationship between attachment and other variables

There was a significant relationship between whether or not the mother or housemother said the child was closely attached to her, and the frequency with which she played with the child, in the case of the adopted children ($\chi^2 = 11.8$, *d.f.* 2, $P < 0.002$), and the institutional children ($\chi^2 = 6.0$, *d.f.* 2, $P < 0.05$) but not for the other groups. However, only two of the 13 mothers of restored children played with them frequently. Whilst half of the over-friendly children were said to be closely attached to their mothers, there was a significant tendency for the unattached children to be more often over-friendly than the attached children ($\chi^2 = 5.2$, *d.f.* 1, $P < 0.025$).

Of the three institutional children said to be closely attached to their housemothers, one had been with the same houseparents in an all-age home since infancy, and two had been with the same houseparents since transfer to an all-age home at the age of 4½. The four non-attached children had witnessed many staff changes. Only one of these children was over-friendly and attention-seeking; one was somewhat withdrawn, whilst two were very hostile to both adults and children.

RESULTS 2: I.Q. AND READING SCORES

WISC scores by placement

Table 4 shows that the institutional and earlier restored groups were still of average I.Q., and the earlier adopted children still had above average I.Q.s. The differences between the I.Q.s of the six largest groups were statistically significant ($F = 3.2$, $P < 0.01$). Differences in variance between the groups, as assessed by Bartlett's test, were not significant. Comparisons between the I.Q.s of pairs of groups showed that the overall significant difference was due mainly to the higher I.Q.s of the earlier adopted children. Very similar results were obtained by analysing the scores on the verbal and performance scales separately, although differences were

only statistically significant on the verbal scales. Sex differences were not significant.

TABLE 4. WPPSI AND WISC I.Q.s OF CHILDREN TESTED AT 8

Group	N	WPPSI I.Q.s at 4½		Full Scale I.Q.		Verbal I.Q. at 8 years		Performance I.Q.	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Adopted between 2 and 4	20	116.1	11.6	115.0	12.0	112.9	9.9	114.1	15.2
Restored between 2 and 4	9	98.2	10.4	103.4	16.6	101.8	15.7	104.7	17.8
Adopted after 4½	5	104.8	12.2	100.6	17.6	95.0	19.8	106.6	11.9
Restored after 4½	4	98.8	9.7	93.0	18.8	93.0	18.5	94.3	21.1
In institution throughout	7	105.1	10.4	98.6	9.9	97.0	12.1	100.7	8.6
Fostered after 4½	3	102.7	8.5	94.7	2.3	101.7	11.0	89.0	6.9
Several placements	3	98.0	10.1	97.3	9.0	97.0	12.5	97.7	4.0
London comparison	29	111.9	11.7	110.4	13.8	110.7	13.2	108.2	13.7

I.Q. changes between 4½ and 8 years

The mean I.Q.s of most groups had remained relatively constant over the previous four years. The I.Q.s of six of the seven institutional children had fallen by an average of 6.6 points. The later adopted children had not increased in I.Q. since leaving the institution. Because of the interest of the finding the scores of all the children who did not leave the institution until after the age of 4½ and who could be tested at the age of 8 are set out in Table 5. Only one child, the earliest to move, had substantially increased in I.Q. Ten of the 14 children had decreased in I.Q.

TABLE 5. I.Q.s OF CHILDREN WHO LEFT THE INSTITUTION AFTER 4½ YEARS

Type of placement		WPPSI	WISC	Age at leaving	
		Full-scale I.Q. at 4½	Full-scale I.Q. at 8	Institutions	
Adopted into non-manual family	1	107	125	4 yr	6½ months
	2	111	104	5 yr	0 months
	3	114	107	7 yr	4 months
Adopted into manual family	1	Too shy to test	84	5 yr	2 months
	2	87	83	7 yr	1 month
Fostered into non-manual family	1	106	92	6 yr	7 months
Fostered into non-manual family, then returned to institution at 8 years	1	109	106	5 yr	1 month
	1	93	90	5 yr	3 months
Fostered into manual family	2	109	96	5 yr	10 months
Fostered into manual family at 6 years 9 months after earlier restoration at 4½ years	1	89	88	4 yr	6½ months
	1	101	90	4 yr	7 months
Restored into manual family	2	111	114	4 yr	9 months
	3	95	99	4 yr	10 months
	4	88	69	7 yr	2 months

I.Q., race and social class of family placement

Table 6 suggests that a major factor in determining the higher mean I.Q. of the adopted children is the larger proportion of adoptive than natural fathers who are non-manual workers. There is also a consistent trend for the black children wherever

placed to have higher I.Q.s than the white children. However, the cell sizes are too small for statistical analysis to be appropriate.

TABLE 6. I.Q.s AT 8 YEARS BY SOCIAL CLASS, TYPE OF PLACEMENT, AND RACE

TABLE 6. I.Q.s AT 8 YEARS BY SOCIAL CLASS, TYPE OF PLACEMENT, AND RACE											
In Institutions				Adopted and fostered*				Restored to natural parent			
	N	Mean	S.D.		N	Mean	S.D.		N	Mean	S.D.
White	3	95.7	9.3	White	11	114.4	9.7	White	2	118.0	1.4
				Non-manual homes			Non-manual homes				
				White	8	97.8	15.9	White	6	85.5	12.8
				Manual homes			Manual homes				
Black	5	101.8	9.9	Black	7	117.6	14.0	Black	1	120.0	—
				Non-manual homes			Non-manual homes				
				Black	3	101.7	13.9	Black	4	108.5	7.1
				Manual homes			Manual homes				

*One child placed only a few weeks before testing was omitted.

Joint child-adult activities and I.Q.

When the children were $4\frac{1}{2}$ we found small but significant associations between certain kinds of experiences provided for them, e.g. being read to, and their I.Q. At 8, we asked about the frequency with which the parents played games with the child, engaged him in joint household activities, e.g. cooking, helped him with school work, and read to him. Most of these activities are not necessarily very intellectual, and we were mainly interested in them because of the opportunity they provided for an attachment to develop between adult and child.

Nevertheless, because joint adult-child activity also provides an opportunity for verbal learning to occur it seemed possible that there might be an association between the child's I.Q. and the amount of such activity. For the whole group of 74 children there was a small correlation between WISC I.Q. and the frequency with which the parent played with the child ($r = 0.23$, $P < 0.025$). This was mainly because the adopted children tended to have higher I.Q.s and to be played with more, and was not true within each group.

I.Q. and attachment to mother-figure

There were significant point-biserial correlations between the mother or house-mother's belief that the child was attached to her and the child's I.Q., not simply overall, which could be accounted for by the fact that the adopted children tended to be both attached and of higher I.Q., but also within the separate groups. The correlations were $r = 0.34$, $P < 0.05$ for adopted children and $r = 0.59$, $P < 0.02$ for restored children, and $r = 0.50$, $P < 0.12$, for institutional children. (Since almost all the London working-class children were attached to their mothers, significant correlations were not found within the comparison group.)

Behaviour problems and I.Q.

For all 74 children, there was a significant negative relationship between I.Q. and number of teacher-reported problems ($r = -0.28$, $P < 0.008$). There were also significant negative relationships between I.Q. and number of parent reported problems for all 74 children ($r = -0.39$, $P < 0.001$), and for the adopted and restored groups separately ($r = -0.56$, $P < 0.002$, and $r = 0.79$, $P < 0.001$).

I.Q. and biological parentage

No I.Q.s were available for either the biological or adoptive parents, and information on the education and occupation of the biological parents was incomplete. So far as it goes, the evidence does not suggest that the above-average I.Q. of the adopted children was due to the selective placement of children of "superior" background into non-manual families—the great majority of all the biological fathers were manual workers. Of the 30 biological fathers of adopted and fostered children, only four were known to have been in non-manual occupations. Two of their children (WISC I.Q.s 104 and 113) had been adopted into non-manual homes and two had been placed in manual homes (I.Q.s 90 and 133).

The mean WISC Full-scale I.Q. of the 12 children of manual workers adopted into non-manual homes was 116.9, S.D. 9.3. (Another child who had only been fostered 6 weeks when tested was omitted from the analysis. All the other children had been placed at least a year before.) The other nine children of manual workers had been fostered or adopted into manual families; their mean WISC Full-scale I.Q. was significantly lower at 98.8, S.D. 13.4 ($t = 3.6$, $P < 0.01$).

Reading scores. The Neale Analysis of Reading Ability gives separate scores for reading speed, accuracy and comprehension. Since for each group the means of these three scores were very similar they were averaged for each child. The order of the reading scores of the different groups of children was almost identical to the order of their I.Q.s. The earlier adopted children were the best readers, with a mean reading age more than 5 months in advance of their chronological age, whilst children restored to their mothers after the age of $4\frac{1}{2}$ were the poorest readers, with a mean reading age more than 7 months below their chronological age. However, because the variance in most groups were large, these differences were not significant.

Reading scores, behaviour problems and attachment to mother figure

As was the case with I.Q.s, taking all groups together there was a significant association between higher reading scores and lower scores on the teachers' and parents' behaviour problem scales ($r = 0.33$, $P < 0.002$ and $r = 0.25$, $P < 0.016$, respectively). Taking the groups separately, the association was only significant within the London comparison group ($r = 0.38$, $P < 0.002$) for I.Q. and teacher problems although it lay in the same direction in all groups. As with I.Q., there was a significant point biserial correlation between reading scores and attachment to mother for all the ex-institutional children ($r = 0.33$, $P < 0.01$) but not for the London comparison group.

DISCUSSION

At the age of 8, there were marked differences between the ex-institutional groups. Children adopted before the age of 4 had a mean I.Q. of 115, compared with a mean of 103 for children restored to their natural families at a similar age. This adopted group also had a reading age 10 months in advance of that of the restored children. These cognitive measures appeared in the main to be related to the social class of the home in which the child was living, but there were also significant associations within each group between cognitive measures, attachment to the mother, and a relative lack of behavioural problems. From our evidence one can

only speculate as to how these factors were inter-related—it is possible, e.g. that those children who from the start presented their parents with severe behaviour problems less often developed mutual attachments with them and in consequence spent less time with them and received less intellectual stimulation.

There was also a large difference in the reported behaviour of adopted and restored children. Nearly two-thirds of the restored children, but only 12 per cent of the adopted children had been referred by a parent or teacher to a Child Guidance Clinic. The only difference between the kinds of problem reported by the adoptive mothers and their middle-class controls was the greater frequency of attention-seeking and "over-friendly" behaviour in the adopted children; but the restored children were said by their mothers not only to be attention-seeking and over-friendly, but also to have nervous tics and a variety of nervous habits, nervous stomach aches and to stammer more often than their working-class controls.

Further, whilst 21 of the 25 adoptive mothers believed their children were closely attached to them, only a half of the natural mothers believed that the child was attached to them. There was no evidence to suggest that the adopted children's attachments were "insecure", e.g. they were no longer particularly clinging toward their parents, as most of them had been when first placed.

The first conclusion which it seems reasonable to draw is that the subsequent development of the early institutionalized child depends very much on the environment to which he is moved. This seemed to be as true of attachment behaviour as of emotional problems and cognitive development. One child who had been disliked by the nurses and had seemed uninterested in them at 2 and $4\frac{1}{2}$ years was adopted at 7 and at $8\frac{1}{2}$ seemed to have developed a close affectionate relationship with both parents, though holding aloof from other adults and from children. Another child who had a close affectionate relationship with the matron of a small home was restored at 5: at 8 she and her mother seemed indifferent to each other.

The adoptive and natural parents differed in a number of respects, quite apart from social class. The adoptive parents, having very much wanted a child, were willing and happy to devote a great deal of time to him. The mothers of the restored children, who had left their child in care for several years, had been ambivalent or definitely reluctant to take him back. Moreover, the restored children tended to have more siblings, especially younger siblings, who occupied the mother's time and for whom she often openly expressed a preference. Further, whilst both adoptive parents were usually affectionate and welcoming, many restored children returned to a step-father who was indifferent or even hostile to them, or showed an open preference for his own children.

The later the child was restored, the less likely was it that a mutual attachment had developed. This was not true of the adopted children, and it appears to reflect the fact that the longer the mother left the child in care, the less room she had for him in her life. Few natural mothers played with their children, and they expected the child to be very independent, e.g. most of the restored children but only one adopted child regularly put themselves to bed. The adoptive mothers on the other hand spent a great deal of time playing with the children, and seemed ready to accept and even enjoy dependent behaviour patterns more appropriate in younger children. This was probably not only because they had very much wanted a child,

but because most had asked for a child younger than the one placed with them.

Nevertheless, there were resemblances between the two groups of ex-institutional children. A half of the restored children and a third of the adopted children, but very few home-reared children, were considered by their mothers to be over-friendly to strangers and attention-seeking. At school, the teachers found both groups of children much more of a problem than their parents did.

The major complaints were with respect not only to attention-seeking behaviour, but also restlessness, disobedience, and poor peer relations. However, it seemed to us possible that all the children's problems at school stemmed not from a conduct disorder of the usual kind, but from two basic characteristics, both concerned with their social behaviour—an almost insatiable desire for adult attention, and a difficulty in forming good relationships with their peer group, although often they got on much better with younger and older children. Indeed, several of the parents suggested to us that the children's restlessness and disobedience at school, which was very much more marked than at home, were secondary to attention-seeking. As one mother put it, "I think her teacher doesn't praise her enough—praise is what she's seeking all the time. I know they can't always single her out for attention, but the time when she was in least trouble at school was when she was in a small class".

These findings appear to suggest that up to 6 years after leaving the institution some children still showed the effects of early institutional rearing. Other explanations of the findings are of course possible. First, there is the possibility that these children were genetically predisposed to emotional instability. In support of this, one could point to the fact that many had been left for at least 2 years in the institution either because their family psychiatric history was considered suspect (in fact, none had a history of schizophrenia) or because their mothers could not decide either to reclaim them or to offer them for adoption. A genetic hypothesis is very difficult to test in any direct way. The best evidence might come from a comparison with children born to the same parents but reared at home. A finding that such children had a much lower rate of behavioural difficulties would be strong evidence against the genetic hypothesis. However, only two of the children had such a sibling.

Second, one could argue that the mothers of all these children must have been under considerable stress during pregnancy, and during and after childbirth, and that this stress in some way led to the children's subsequent difficulties. If it were this factor, rather than early institutional rearing or a particularly unstable genetic inheritance which was responsible for our children's problems, then one would expect to find similar disturbance in other adopted children, who had not been reared in institutions. The most comprehensive study of adopted children in Britain is that of the National Child Development Study, on the children in the 1958 birth cohort who had been adopted (Seglow *et al.*, 1972). Most of these children were placed in the first 6 months of life, and only 3 per cent after the age of 2. Twenty-five per cent of the adopted 7 year old boys were considered maladjusted by their teachers, using the Bristol Social Adjustment Guide, compared to 17 per cent of boys in the whole birth cohort. However, the difficulties were largely in the sphere of peer relations; attention-seeking behaviour, and restlessness were not significantly

greater in the adopted group. A Swedish survey of adopted children, who again were almost all adopted in the first few months of life found that at age 11, 20 per cent of the adopted boys, compared with 10 per cent of their classmates, were considered to have behaviour problems at school (Bohman, 1971).

It seems likely that the ex-institutional children in this study more often had problems at school, and of a particular kind, than children adopted in infancy, and that an explanation simply in terms of the effects of maternal stress before and after the child's birth is not adequate. Another possible explanation is that some aspect of their present situation could account for their behaviour. The environment of the adopted and restored children was so different, however, that it is difficult to see a common element which could be responsible. A third of the children were black or of mixed race, and it could be argued that this fact may have led to problems at school, but in fact these children had no more nor less problems than the white children. It could be argued that the frequency of attention-seeking behaviour might be related to the children's position as the only or youngest child of middle-aged indulgent parents. However, this behaviour was shown just as frequently by children adopted by younger couples, and similar and even more pronounced behaviour was found in children restored to large and impoverished families where the child was more often neglected than indulged. Finally, the evidence of the children's case notes showed that the most difficult children had generally already been identified as such in the nursery.

Whilst, therefore an explanation for the children's behaviour in terms of their current environment cannot be ruled out, it is difficult to think of one which could account for the data. It seems more likely that the common difficulties of many of the restored and adopted children were due to their institutional experiences, perhaps in interaction with genetic or biological factors. The multiple and ever-changing caretaking which these children had experienced—on an average 50 different caretakers by the age of $4\frac{1}{2}$ —must be unique in the history of child-rearing, and it would be surprising if it had not at the time affected the children's social development. It also seems likely that attention-seeking and "over-friendliness", once established, are difficult behaviours to modify. It is important to note that only perhaps a half of the adopted children and three-quarters of the restored children had particular problems. Nothing in our data, e.g. with respect to the number of institutional caretakers or the characteristics of the families the children entered, explains why this should be so, but our measures of the two environments were certainly crude.

It was not, of course, the case that most of the ex-institutional children were "affectionless", or showed the grave defects described by earlier authors. Twenty out of the 25 adopted children seemed within a year of leaving the institution to have formed a close mutually affectionate relationship with their new parents. It was rather with other adults and with their peers that about a half of these children had problems. Whether or not the child became attached to his new parents seemed to depend not on the relationship he had had with the nurses in the institution but largely on the willingness of the new parents to accept a dependent relationship and to put a lot of time and effort into developing it.

These findings appear, then, to lend some support to the notion that early

experiences may play a critical role in some aspects of later development. It should be noted, however, that we did not study children who entered institutions at the age of 2 or 3—it may be that exposure to similar experiences at any time during the early years of dependency could have similar developmental effects.

The cognitive findings also give a limited support to the notion of a critical period. Of the 10 children tested at the age of 2 and later adopted before the age of 4, all had increased in I.Q. by the age of $4\frac{1}{2}$ years, most very markedly. But of the children adopted or fostered after the age of $4\frac{1}{2}$ only one, the first to go, increased in I.Q. Since the number placed in non-manual homes was very small the finding is of limited significance, and difficult to interpret. It may be the case that it is more difficult to increase I.Q. as the child grows older merely by placing a child with middle-class parents. This may be in part because he spends more time at school and playing with other children than does a younger child, and there is less opportunity for the intensive informal "tutoring" characteristic of middle-class families to occur. It may also be more difficult by this age, without special educational measures, to alter the child's style of interacting with adults. Since what he learns depends in part on his own contribution to an encounter, e.g. the kinds of questions he asks, his response to a changed environment will be determined not only by the characteristics of the new environment but by his own previous environmental and biological history. It is also possible that the considerable confusions in the minds of many of the older children about their own identity hindered the use they could make of new experiences.

From a policy point of view, it is important to note that the great majority of the adoptive parents appeared to be deeply attached to the children. For the adoptive parents, the crucial aspect of the adoption was the development of a mutual attachment—if this was present, they were prepared to tolerate difficult behaviour or educational backwardness.

Because only seven children had remained in institutions throughout, very limited conclusions can be drawn from this study about the effect of continual institutional care. Our initial prediction that these children would become more deviant by the age of 8 was only partially confirmed. For two children, the move from their residential nursery to exceptionally stable all-age homes meant that for the first time they experienced continuity of care with a housemother who took a particular interest in them, and both houseparents and teachers considered that these children had at present few problems. However, six of the seven were said by their teachers to be less popular than other children in their class. Their I.Q.s ranged from 88 to 113; only one child had an I.Q. below 91. Nor were they as a group educationally retarded—one child was not reading, but the others had reading ages near or above their chronological age. In all but one case, this level of cognitive development had been achieved despite the lack, not only of a permanent mother figure but of any continuing contact with an adult. One child who had been in the same all-age home since infancy had been looked after by only 11 different staff, but for the other children the numbers ranged from 40 to a conservative estimate of 80. At the age of 8, as at $4\frac{1}{2}$, we found no evidence of a relationship between the child's I.Q. and the number of staff who had looked after him.

Not only the institutional group, but also the restored group, contain a very

small number of cases. But because of the almost total lack of information about the development of children restored from institutions to their natural parents the data require consideration. Our study suggests that a policy of allowing parents to leave their children in institutions for a number of years, or of putting pressure on reluctant parents to reclaim their children, may not be in the best interests of the child. On all our measures, restored children tended to have fared worse than the children released for adoption. The social implications of the study, together with much additional information, is discussed further elsewhere (Tizard, 1977).

Two methodological problems have to be acknowledged. First, as discussed earlier, a possible source of bias was the fact that both authors could not avoid knowing to which group the children belonged. Second, they depended for the account of the child's behaviour at home, and his relationship with his parents, on his mother's account. Again, this seemed in practice unavoidable (e.g. few parents would have tolerated the child being interviewed) but the possibility of a variety of biases on the part of the different groups of parents and houseparents is evident.

Finally, it should be noted that the children are still very young, and that it is too soon to come to any conclusions about the long-term effects of their early experiences.

SUMMARY

Fifty-one children who had spent their first 2-7 years in institutions, and who had been previously visited at the age of $4\frac{1}{2}$ years, were reassessed at the age of 8. Seven children had never left the institutions, the rest had been adopted, fostered, or restored to their biological parent. The children's behaviour during psychological testing was assessed, and information was obtained from their parents and teachers. According to the parents' reports, the ex-institutional children did not present any more problems than the comparison groups. The teachers, however, found many differences between the ex-institutional children and their classmates. Despite very frequent staff changes, the institutional children were not retarded. The adopted children had the highest mean I.Q. and reading achievements; this finding appears to be related to the higher social class of the adoptive parents and the poorer emotional adjustment of the children restored to their biological families.

Acknowledgements—This research was supported by grants from Dr. Barnardo's Society and the Social Science Research Council, and dependent of the generous co-operation of the staff of Dr. Barnardo's Society, the Church of England Children's Society, the National Children's Home, and the many biological and adoptive parents. We are grateful to Ann Clarke and Michael Rutter for their comments on the findings.

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BRIEF FOCAL FAMILY THERAPY WHEN THE CHILD IS THE REFERRED PATIENT—II. METHODOLOGY AND RESULTS

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INTRODUCTION

OVER THE past 20 yr, consideration of the family as a target for change in child psychiatry has become established (G.A.P. Report, 1970; Sager and Kaplan, 1972). In our growing experience of working with families in the Department of Psychological Medicine at the Hospital for Sick Children, we have become convinced of its usefulness in producing symptomatic remission in children. However, despite this, and other positive impressionistic reports of the value of the family approach, there have been relatively few attempts to evaluate it. Wells *et al.* (1972) reviewed the literature and found only two studies, both of adults and from the same research programme, which could be considered methodologically adequate. Measurement of outcome in these two studies was based on rates of rehospitalization. From a family theory point of view, knowledge of family change is as important. However, despite a large number of attempts (Straus, 1969), few instruments exist with adequate psychometric properties to measure such changes. One widely used test (Ferreira and Winter, 1965) is a decision-making task: although it distinguishes normal and abnormal families, it showed no change after family therapy (Ferreira and Winter, 1966). Most studies (Wells *et al.*, 1972) relied on clinical judgement despite its drawbacks. More recently, the particular difficulties in this field have been reviewed by Framo (1972) and Cromwell *et al.* (1976).

We have been concerned not only about the conflicting merits of child vs family treatment (McDermott and Char, 1974) and the implications for resource allocation, but also with the question as to whether families were actually changing as a result of our therapy. These concerns led us to develop a time-limited focused technique for use with families and to organize our data collection to include evidence of family change. We were stimulated by the successful use of a focal approach to shorten individual psychoanalytic therapy, introduced by Balint *et al.* (1972) and developed by Malan (1963, 1976) at the Tavistock Clinic. In association with this therapeutic model, Malan has developed a methodology for the assessment of improvement on an "individualized" basis (1959).

Fiske *et al.* (1970) in their recommendations to researchers planning studies of effectiveness of psychotherapy note: "Little systematic consideration has been given

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